



VSB – TECHNICAL UNIVERSITY OF OSTRAVA  
FACULTY OF ECONOMICS

DEPARTMENT OF MARKETING AND BUSINESS

Intergenerational Analysis of Consumer Behaviour on the Digital Music Market

Mezigenerační rozdíly v chování spotřebitelů na trhu digitální hudby

Student:

David Božon

Supervisor of the Bachelor Thesis:

doc. Ing. Vojtěch Spáčil, CSc.

Ostrava 2016

VŠB - Technical University of Ostrava  
Faculty of Economics  
Department of Marketing and Business

## Bachelor Thesis Assignment

Student: **David Božon**  
Study Programme: B6208 Economics and Management  
Study Branch: 6208R062 Marketing and Business  
Title: Intergenerational Analysis of Consumer Behaviour on the Digital Music Market  
Mezigenerační rozdíly v chování spotřebitelů na trhu digitální hudby  
The thesis language: English

### Description:

1. Introduction  
2. Theoretical issues of consumer behaviour  
3. Characteristics of Czech and English music market  
4. Research methodology  
5. Research findings  
6. Conclusion  
Reference List  
List of Abbreviation  
Statement on the Use of the Results of the Diploma Thesis  
List of Appendices  
Appendices

### References:

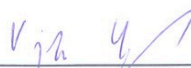
KARDES, R. F., L. M. CRONLEY and T. W. CLINE. *Consumer Behavior*. Mason: South-Western Cengage Learning, 2011. 421 p. ISBN 978-0-538-74540-6.  
MALHOTRA, Naresh K. *Marketing Research. An Applied Orientation*. 6th ed. New Jersey: Prentice Hall, 2010. 929 p. ISBN 978-0136094234.  
VAN DEN BERGH, Joeri and Mathias BEHRER. *Why Cool Brands Stay Hot*. London: Kogan Page, 2013. 288 p. ISBN 978-0749468040.

Extent and terms of a thesis are specified in directions for its elaboration that are opened to the public on the web sites of the faculty.

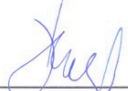
Supervisor: **doc. Ing. Vojtěch Spáčil, CSc.**

Date of issue: 20.11.2015

Date of submission: 06.05.2016

  
\_\_\_\_\_  
doc. Ing. Vojtěch Spáčil, CSc.  
*Head of Department*



  
\_\_\_\_\_  
prof. Dr. Ing. Dana Dluhošová  
*Dean of Faculty*

#### **Declaration of Independent Elaboration of a Bachelor Thesis**

I hereby confirm that I made the available dissertation independently and without use of others than indicated aids. All places, which literally or in general manner from published and not published sources were inferred, are marked as such. The work was never submitted to any examining authority in this or any similar form.

Ostrava, 12.7.2016

David Šim

---

## **ACKNOWLEDGEMENT**

First of all, I would like to express sincere thanks to my supervisor doc. Ing. Vojtěch Spáčil, CSc., for his help, advices, guidance, support and encouragement throughout this project. Secondly I would like express my appreciation to my family, especially to my parents, and friends, for their support over the whole academic year. My gratitude also extends to all the participant, who were willing to complete the questionnaire.

## **ABSTRACT**

This research aims to analyse consumer behaviour on digital music market, in the times, when digital music revenues channels finally reach to cope with the physical ones. This paper examines two generations – Generation X and Millennials, on digital music listening habits, preference of digital music platform, willingness to pay for digital music content, music piracy habits and more. Additionally, this paper also compares differences in two countries – United Kingdom and Czech Republic. In order to address these objectives, the primary data were collected through the online questionnaire. To analyse the findings, various statistical methods, such as one-way ANOVA test and correlations. This research found that the vast majority of Millennials listen to the digital music content, while most of the Generation X do so as well, however they do not so often. Additionally, findings show that Generation X is less willing to pay for the digital music files than Millennials. Moreover, the results show that majority of Millennials pirate music, while half of the Generation X states that they do not. The comparisons stated above are examined with two countries – United Kingdom and Czech Republic as well.

# Table of Content

<b>1</b>	<b>Introduction.....</b>	<b>1</b>
<b>2</b>	<b>Theoretical Issues of Consumer Behaviour .....</b>	<b>3</b>
<b>2.1</b>	<b>Consumer Behaviour.....</b>	<b>3</b>
2.1.1	Market segmentation .....	3
2.1.1.1	Demographic segmentation.....	3
2.1.1.1.1	Generation X .....	4
2.1.1.1.2	Millennials .....	6
2.1.2	Consumer Decision Process .....	8
2.1.2.1	Problem Recognition.....	9
2.1.2.2	Information search.....	9
2.1.2.3	Evaluate Alternatives .....	10
2.1.2.4	Product choice .....	11
2.1.2.5	Postpurchase Evaluation.....	11
<b>3</b>	<b>Characteristics of Czech and English Music Market.....</b>	<b>12</b>
3.1.1	General description of digital music market.....	12
3.1.2	Digital download .....	13
3.1.3	Streaming services.....	14
3.1.4	Other platforms .....	15
3.1.5	Music Piracy.....	16
<b>4</b>	<b>Research Methodology .....</b>	<b>18</b>
<b>4.1</b>	<b>Research Approach .....</b>	<b>19</b>
<b>4.2</b>	<b>Research Strategy .....</b>	<b>19</b>
<b>4.3</b>	<b>Research Method.....</b>	<b>19</b>
<b>4.4</b>	<b>Population .....</b>	<b>20</b>
<b>4.5</b>	<b>Sampling .....</b>	<b>21</b>
<b>4.6</b>	<b>Distribution of Questionnaires .....</b>	<b>21</b>
<b>4.7</b>	<b>Design of Questionnaire.....</b>	<b>22</b>
<b>4.8</b>	<b>Pilot Study .....</b>	<b>24</b>
<b>4.9</b>	<b>Limitations of Research .....</b>	<b>25</b>
<b>4.10</b>	<b>Profile of Respondents.....</b>	<b>26</b>
<b>5</b>	<b>Research Findings .....</b>	<b>30</b>



<b>5.1</b>	<b>General Findings .....</b>	<b>30</b>
5.1.1	Frequency of Listening to Music .....	30
5.1.2	Activities when Listening to Music .....	31
5.1.3	Devices to Listen to Music .....	32
5.1.4	Frequency of the Internet usage .....	33
<b>5.2</b>	<b>Digital Music Listeners .....</b>	<b>34</b>
<b>5.3</b>	<b>Digital Music Platforms .....</b>	<b>37</b>
<b>5.4</b>	<b>Payment for Digital Music .....</b>	<b>41</b>
<b>5.5</b>	<b>Music Piracy Habits .....</b>	<b>44</b>
<b>5.6</b>	<b>Analysis of statements .....</b>	<b>48</b>
<b>5.7</b>	<b>Discussion .....</b>	<b>54</b>
<b>6</b>	<b>Conclusion .....</b>	<b>58</b>
	<b>Reference List.....</b>	<b>61</b>
	<b>List of Abbreviations.....</b>	<b>66</b>
	<b>Statement on the Use of the Results of the Diploma Thesis</b>	
	<b>List of Tables</b>	
	<b>List of Figures</b>	
	<b>List of Appendices</b>	
	<b>Appendix A</b>	
	<b>Appendix B</b>	
	<b>Appendix C</b>	
	<b>Appendix D</b>	
	<b>Appendix E</b>	

# **1 Introduction**

Music is very important part of life of each individual. It is in fact ubiquitous and it plays significant role in life of the most people. The music, and its industry is very fast changing sector, which went through many drastic transformations, especially over the last two decades. The biggest disruptions in music were caused by digitalization, the Internet and technology. These disruptions led to digital music market as it is known today.

The vinyl records, which could hold usually about six songs were mostly replaced by CDs in the 80's. New format of CD could hold up to 80 minutes of music, which allowed artists to release more songs and in easier way. However, this is also considered as a negative impact on music in general as many artists were pushed to release more songs at the expense of overall quality of album as many songs were used to “fill the space”. The biggest disruption however came with the invention of digital music format, which quickly gained popularity as it was easy to store. The iPod was a game changer as it allowed its owners to carry with them large amount of music with them anywhere. The industry introduced digital music stores, and eventually, music streaming, which is gaining a lot of popularity in recent years. These advances also allowed people to buy each song individually instead of purchasing whole albums. Nowadays, listeners tend to listen to playlists instead of albums. In 2014, the digital music channels generated globally the same amount of revenue as physical sales, for the first time in the history (IFPI, 2015). However, the digitalization also had a negative impact on the music industry as it also created an easy way to access pirated music.

The aim of this research is to analyse difference between two generations – Generation X and Millennials, on digital music market. Additionally, this paper also focuses on two different geographically different locations – United Kingdom and Czech Republic. The comparison of consumption, preferences and attitudes on digital music market among these generations and countries will be examined. For purpose of this paper, the author set research objectives, which are stated later in this paper.

This paper is divided into five sections. In the next section, the generations and their characteristics, decision making process and the digital music market is reviewed and objectives of this research are set. Then in the following section, the methodology of research of this paper is defined as well as rationale behind conducting a questionnaire. In the next section, the research findings are analysed followed by discussion and conclusion of this research.

## **2 Theoretical Issues of Consumer Behaviour**

### **2.1 Consumer Behaviour**

Solomon describes consumer behaviour as a study of involved processes when “individuals or groups select, purchase, use, or dispose of products, services, ideas, or experiences to satisfy needs and desires” (2015, p. 28). Blackwell, Miniard and Engel create more simple definition of consumer behaviour – “why people buy” with premise of developing strategies to influence customers more easily when marketers know why people buy specific brands and products (2001, p. 6).

#### ***2.1.1 Market segmentation***

Market segmentation is a process of identifying different groups of people with some similarities based on variety of characteristics and behaviours (Blackwell et al., 2001). The purpose of identifying these groups of people with similar behaviour to adjust and adapt product, packaging and communication strategies in order to meet specific needs of a segment and increase a possibility of sales to these specific segments (Blackwell et al., 2001). According to company’s goals and resources, it can focus just on one segment or it can concentrate on several segment, or even it can ignore segmentation of consumers and strive for mass market strategy (Solomon et al., 2013). Blackwell et al., define market segment as a “group of consumers with similar needs and behaviour that differ from those of the entire mass market” (2001). Solomon et al. divide market segmentation into four categories – demographics, geographic, psychographic and behavioural, when each of these has its many subcategories (2013).

##### ***2.1.1.1 Demographic segmentation***

Demographic segmentation is the most broadly used type of segmentation method (Doyle, C., 2011). It is based on statistics which include observable aspects of population such as age, gender, social class, birth rate and consumer preference. These data are often retrieved from national and pan-European statistical agencies such as EuroStat which are

obtained through census. However, companies collect various additional data on demographic segments by themselves. These data help marketers to segment population in groups in multiple ways. Demographic studies can reveal changes and trends, which is in great benefit and interest to marketers, because they can predict and locate size and changes in markets for various products (Solomon et al., 2013) (Doyle, C., 2011). For purpose of this research, the main emphasis from demographic factors is taken on age, specifically on generation X and Millennials (also known as generation Y).

#### 2.1.1.1.1 Generation X

Douglas Coupland created the name “Generation X” when he published a novel book with same name, describing this generation (1996). However, there are many other names which are used for generation which was born in 1960s and 1970s such as post-boomers, baby busters (Fay, W. B., 1993) and even “Me Generation” (Sayers, R. 2007). The span of years when Generation X starts and ends is not unanimously agreed and many authors characterize them differently (Jennings, L., 2012; Crampton, S., & Hodge, J., 2011 and more). Years between 1965 and 1979 proposed by Crampton S. and Hodge J. will be used for purpose of this research (2011).

Each cohort has its defining influential events. The events which influenced Generations X are the fall of the Berlin Wall, Vietnam War, end of the Cold War and more (Waterworth, 2013). Generation X is responsible for many life changing products as well as companies, such as Amazon, Google and YouTube (Solomon, M. R., 2015)

Nowadays, people considered to belong to Generation X (Gen Xers) are around 35 to 55 years old, depending on which characterization is being used. They are considered to be busy family people who live commonly in households of two incomes (Jennings, L., 2012). Additionally, they do not rush to retire and they are financially stable, despite that they committed themselves to mortgages and saving money for their children’s education as well as their golden age (Jennings, L., 2012).

Gen Xers are children of previous generation of baby boomers which tend to be workaholics. Additionally, parent of Gen Xers experienced highest number of divorces and many of them were born out of marriage and were growing up without father (Crampton et al., 2006). Because of these circumstances, Gen Xers were usually without parental supervision after they came back from schools as children. Therefore, they feel less appreciated and overlooked but on the other hand, they learned how to be self-reliant (Crampton et al., 2006). Additionally, they tend to be more insecure than Baby Boomers and Veterans. Gen Xers witnessed their parents to work many hours for single company and then become victims of higher unemployment. Moreover, job insecurity became common in every day work (Crampton et al., 2006).

In the 1980s and the 1990, major recessions took places in several places around the world including Western Europe. These recessions lead to industrial restructuring, downsizing of organization, increased number of part-time and temporary jobs which all had affected Gen Xers. They have been expecting high and prosperous careers which they have seen within their parents. However, limitation of labour market opportunities created a mismatch with their expectations, which makes Gen Xers first generation within 150, which does not match living standard of their parents (Barrow, 1994). These factors led Gen Xers to tendency to be less loyal to their employers than previous generations (Crampton et al., 2006).

This could have led Gen Xers to lower work commitment. Krahn H. J., and Galambos N. L. claim that Gen Xers put more value on extrinsic than intrinsic work (2014). However, Barnard, Cosgrave and Welsh disagree and suggest distinct conclusion that Gen Xers are not disaffected at all. They suggest that Gen Xers demand in their working environment challenge, task variety, collaboration and greater impact even though they tend to be less committed to traditional establishments. According to them, Gen Xers are more affected by intrinsic than extrinsic motivation (1998).

Generation X tends to have attitude to look for oneself and are more cynical than previous generations (Crampton et al., 2006). They are less optimistic than previous generations, however, they still believe in themselves (Yigit and Aksay, 2015). Generally,

Gen Xers are more individual people, but on the other hand, this leads them in having a shortage of political alliances (Crampton et al., 2006). They tend to find more of a balance between life and work, and they usually adopt to changes, especially with technology (Crampton et al., 2006). Gen Xers are the first one who grew up with personal computers (Yigit and Aksay, 2015), however, they are not shaped by technology as Millennials.

Gen Xers are very brand loyal. Moreover, they are college educated and they have desire to socialize. They are willing to spend more for quality, however they want to feel that they get good value in exchange for price (Jennings, L., 2012). Gen Xers are first generation on which more sophisticated marketing strategies were applied to as previous generation of baby boomers was target of a mass marketing strategy (Jennings, L., 2012). Gen Xers are more likely to notice product placement in advertisements as well as outdoor advertisement such as billboards (Hildebrandt, 2011). They require honest and straightforward approach of advertisement and they tend to be sceptical about modern ways of advertising (Williams and Page, 2011).

#### 2.1.1.1.2 Millennials

Similarly, as previous generation, Millennials have various different names such as Generation Y, Echo Boomer, Why Generation, Net Generation, Nexters and more (Williams and Page, 2011). Millennials' exact range age is not agreed on and it differs by each author's interpretation. However, the range moves between 80's and the start of the new millennium. For purpose of this research, the author has decided to follow definition by Bawany, which put Millennials between 1980 – 1995 (2014).

Crampton and Hodge describe Millennials as most educated, travelled and technologically sophisticated generation (2011). They grew up, while being surrounded by technology and there pointed on as a generation which is online 24/7 (Waterworth, 2013). However, Crampton and Hodge state that they lack interpersonal skills. Schroer states that Millennials are wise in relations to age and that they are immune to traditional marketing technique (2012). Similarly to Generation X, Millennials are also less committed to work in comparison with previous generations. They believe that there is

much more of to life than work, which creates tendency of “work to live” in opposite to “live to work” (Crampton and Hodge, 2011). They value work-life balance, which is top priority for many of them (Jorgensen, 2013). They see job as a contract and not as a call. For this reason, Millennials consider making a lot of many less important than previous generations (Crampton and Hodge, 2011).

Jorgensen shows additional characteristics, which are unique for Millennials. These include strong work ethic, entrepreneur spirit and sense of responsibility (2003). Additionally, Jorgensen describes Millennials as leaders to more tolerant and open society (2003). Moreover, they are highly informed, self-confident and optimistic about their future. Furthermore, they value skill development through coaching and mentoring, and promoting networking for achieving their goals and they like challenges as well as being involved in decision making (Jorgensen, 2003). However, Millennials are easily bored and they have lack of patience, which results in urge of having the desired thing in present time (Crampton and Hodge, 2011). Additionally, Millennials also tend to live healthier life than previous generation (Hildebrandt, 2011).

Millennials use different type of communication than its predecessors. Their communication channels consist of social networks, e-mailing, texting and blogging (Crampton and Hodge, 2011). Therefore, the advertisement for this targeted cohort needed to be addressed via the Internet, e-mails, etc. (Neuborne and Kerwin, 1999). Millennials tend to respond to honesty, humour and irony. Additionally, they are more concern about “green” thinking which helps the environment as they see it as an issue. They are also less brand loyal than its predecessors Gen Xers (Schroer, 2012). Millennials do not want to be told what they should do or buy (Evans, 2008), therefore they tend to do not trust the marketers and rather depend on word-to-mouth or reviews on the Internet (Fallon, 2014). According to McDevitt, Millennials look for quality and good value, better performance than competitors, fitting to one’s personality, trustworthiness, and recommendation, when they are deciding about buying a product (McDevitt, 2013). William and Page suggests, that Millennials are looking for real-life experiences and examples, rather than depending on traditional marketing approaches (2011).



### 2.1.2 Consumer Decision Process

Every single person buys a product only if they have a problem, a want or a need. People take a process of decisions making process every day when buying or using all different kinds of products (Blackwell, et al. 2001, p. 71). Understanding of consumers' decision process leads marketers to know why people do or do not buy products and led them develop strategies accordingly to its knowledge (Blackwell, et al. 2001, p. 71). Solomon describe this as a cognitive decision making, which he describes as an “outcome of a series of stages that results in the selection of one product over competing options”. (2015). Blackwell et al. demonstrate seven steps decision process (see Figure 2.1), however Solomon created five steps process – problem recognition, information research, evaluate alternatives, product choice, post-purchase evaluation, which seems more simplified and will be used it this research (2013).



Figure 2.1 How Consumers Make Decision for Goods and Services. Adopted from Blackwell et al., (2001). *Consumer behaviour* (9th ed.). Ft. Worth, Tex: Harcourt College Publishers.

#### *2.1.2.1 Problem Recognition*

According to Solomon, problem recognition exists when there is a difference between the current state of affairs and a state of affairs, which is desired (2015). Consumers buy products when the cost of the product is less valuable than its ability to solve a problem. The recognition of an unmet need is the first step in the purchase of a product (Blackwell, et al., 2001).

Consumer's needs and purchasing habits can change, as a consumer goes through different stages and changes during a lifetime (Blackwell, et al., 2001).

#### *2.1.2.2 Information search*

After recognition of a problem or need, people start to look for information about specific products or services to satisfy their needs (Blackwell, et al., 2001). Solomon describe information search as a process of surveying the environment to collect suitable data in order to being able to make reasonable decisions (2015). People tend to search for more information when the purchase is important, when information is easier to obtain, or when there is a need of learning more about a product. However, the required search is very individual for each customer, regardless of a category of a product. Nevertheless, young people, well-educated people and people who enjoy shopping tend to search for more information. (Solomon, 2015).

Nowadays, people tend to use the Internet when they look for information. There is enormous number of web sites as well as number of people browsing the Internet. Search engines play a great role in gaining desired information throughout all the online content. However, there is a shift within search method and more people start to use social media for information search (Solomon, 2015).

The search is divided into external and internal. Examples of external search are family, peers, marketplace, etc. Internal search includes retrieving information from own memory or even genetic tendencies (Blackwell, et al. 2001). The search of information

can be also divided into passive and active, when passive search includes being more perceptive to information which surrounds them, while active search includes purposeful research, such as browsing the Internet or visiting specific shop (Blackwell, et al. 2001). Moreover, Blackwell et al. recognize two sources of information (2001):

- **Market dominated information** – is made by suppliers in a form of e.g. advertisement, salesman or website.
- **Nonmarket dominated information** – represent other sources over which marketers have little of control. These include family, friend, opinion-leaders, social media, etc. and are often represented in a form of word-of-mouth.

The depth and length of information search is determined by many factors which affect customers, such as their personality, income, social class, past experiences, prior brand perceptions and their satisfaction. For instance, if customer is pleased with product of specific brand, which they already have used, they might purchase another product of this brand with less or even none search behaviour than they did before (Blackwell, et al., 2001).

#### *2.1.2.3 Evaluate Alternatives*

After consumers find sufficient information, the next step is to make a compare the options and choose, which of the alternative is the best possibility. The selection process start with factors which are most important for a specific customer to start a narrowing process before choosing the one product in the end (Blackwell, et al., 2001).

Blackwell et al. divided criteria for choosing a product into salient and determinant when salient are possible the most important which include characteristics such as price, reliability etc. On the other hand, determinant attributes determine style, adjustment and type and these are the feature consumers actually use to differentiate among their choices (Blackwell, et al., 2001; Solomon, 2013).

Consumers tend to consider only a little number of alternatives within their all possible choices despite all the possibilities available to them. Solomon describe this as evoked set of a consumer (2001). Moreover, people put product in categories to make comparison easier, however this can be both, beneficial or adverse for the specific product, depending to which category will consumer place it (Solomon, 2015). The options, which people consider seriously are based on this evoked set (Solomon, 2015).

These attributes are frequently monitored by customers and their changes can lead into a change of a brand or a product. For example, increase in price could lead into re-evaluation of customer's perception about a brand or a product, because they will try to justify if the increase in price was "fair" (Blackwell, et al., 2001).

#### *2.1.2.4 Product choice*

After consideration of all possible choices in a category, consumer has to choose one. This process can range from a very simple choice to a complicated one, depending on a product as well as on an individual (Solomon, 2015). These choice is generally getting more complicated because of the increasing number of features which products offer (Solomon, 2015).

#### *2.1.2.5 Postpurchase Evaluation*

Postpurchase evaluation is the last step in consumer decision process. Consumers review if they are happy with the choice that they have made after undergoing all steps in a decision process (Solomon, 2015). People evaluate if the product meets or even exceeds their expectations. These leads into either satisfaction or dissatisfaction with the choice, which has big role in a future decision process (Solomon, 2015).

### **3 Characteristics of Czech and English Music Market**

In modern world, everything changes fast. This statements applies well on digital music market. Since its beginning, the digital music industry went through many changes. The first step to digitalizing music was through Compact Disc (CD) (Miller, 2012). Firstly, there was old formats, which were eventually replaced by new format, which could hold up to 80 minutes of music. However, the evolution started with the new millennial when there was a shift from physical to virtual, when the music was downloaded from the Internet (Miller, 2012). Since that point, people were able to download the desired music through legitimate and illegitimate websites. The pioneer in this environment was Napster, which provided free file-sharing platform, which encouraged people to upload their ripped files from their CDs. Napster was eventually shut down due to its illegality, however, it started a desire of being able to download single songs via the Internet in MP3 file (Miller, 2012). These events were followed by introduction of iPod, which started revolution for music industry. People were able to carry large amount of music files with them anywhere. Additionally, iPod was supported by iTunes Store, which allowed user to buy music in legal way (Miller, 2012). After these events, more digital stores started to appear also as well as new methods of acquiring digital music, such as music subscriptions, internet radios, social music platforms, illegal downloads, etc. (Miller, 2012). The digitalization of music changed the whole industry. Not only how consumers listen to music but also how is the music recorded. For purpose of this research, only digital music, which is distributed through digital channels (the Internet) is considered. This exclude physical music in digital format such as CDs from this research.

#### ***3.1.1 General description of digital music market***

The digital music industry created revenue of us\$6.85 billion in 2014 and simultaneously, the digital channels had same amount of revenue globally as the physical format, for the first time in the history in the same year (IFPI 2015). In Czech Republic, the digital channel revenues were still lower to physical in ratio 40:60 in 2015 (IFPI, 2015). This shows that there is a trend of transformation from physical to digital. The

biggest impact on increasing the digital channels had music streaming (IFPI, 2015). It is both, subscription and ad-supported services revenues, growth by 39 per cent between 2013 and 2014, while digital downloads decreased by 8 per cent, nevertheless, they still count for majority of digital music revenue with 52 per cent (IFPI, 2015). Even though digital market is growing, the overall music revenues are still in decline, which represented 0,4 per cent decrease in 2014 to the previous year (IFPI, 2016). The total music market revenue in UK decreased by 2.8 per cents, however it has increased in Czech Republic by 4.6 per cents in 2014 (IFPI, 2015).

### ***3.1.2 Digital download***

Digital download started revolution in distribution of digital music files. This advancement allowed users to be able to buy or download single songs instead of purchasing all CDs (Miller, 2012). There are two ways to download music online – through a digital store or by pirate download. This section focus on digital stores only and the music piracy will be discussed later.

Digital stores allow users to buy digital format of music in various format such as MP3 or AAC to user's computer, smartphones or tablets. This usually requires registration into the digital store. Nowadays, most of the digital stores offer DRM-free downloads, which allows users to copy the music files on their other devices, as it were causing problems in the past (Miller, 2012). The biggest platform for purchasing music is Apple's iTunes Store with over 160 million users (Millers, 2012). iTunes store is available to any users as it is not limited to Apple's devices owners. Another big digital music stores are; Amazon MP3 store, Google Play Music, Bandcamp and more (Miller, 2012).

Digital stores rejoice from big popularity when it started. However, due to piracy and mainly due to increasing popularity of streaming services, digital stores experience decline. They still represented 52 % of revenue stream in digital music market. Furthermore, this number was reduced by 8 per cent in comparison with previous year.

More specifically, the number of purchase per song decreased by 10.9 per cent and number of albums both decreased by 4.2 per cent (IFPI, 2015).

### ***3.1.3 Streaming services***

The advantage of music streaming is that the music is accessible via the Internet, which can save a lot of space on user's computer hard drive, however, it is limited to online connection. These services got very popular during past few years. Subscription services allow users to listen to any number of songs via stream or download. Music streaming services are divided into subscription services and ad-supported streaming (IFPI, 2015). Ad-supported option allows user to stream any music, however, from time to time, they are interrupted by advisements. On the other, paid options do not include advertisements and usually offer downloading the song, so they are available even without the Internet connection.

Streaming services have become very important part of revenue stream for music industry, in which music subscription services play important role. Subscription services has a trend in sustainable and sharp growth for the past recent year and its revenues from 2014 to 2013 were increased by 39 per cent which represents us\$1.57 billion (IFPI, 2015), which is showed in Figure 2.2. The ad-supported stream revenues increases as well (also by 39 per between 2013 and 2014), however it does not have such sharp increase tendency as the subscriptions. One of the driver of this growth is increase of smartphones which are used to listen to music. Another drivers are bundle services provided by mobile providers, which include subscription services within them, and general awareness (IFPI, 2015).

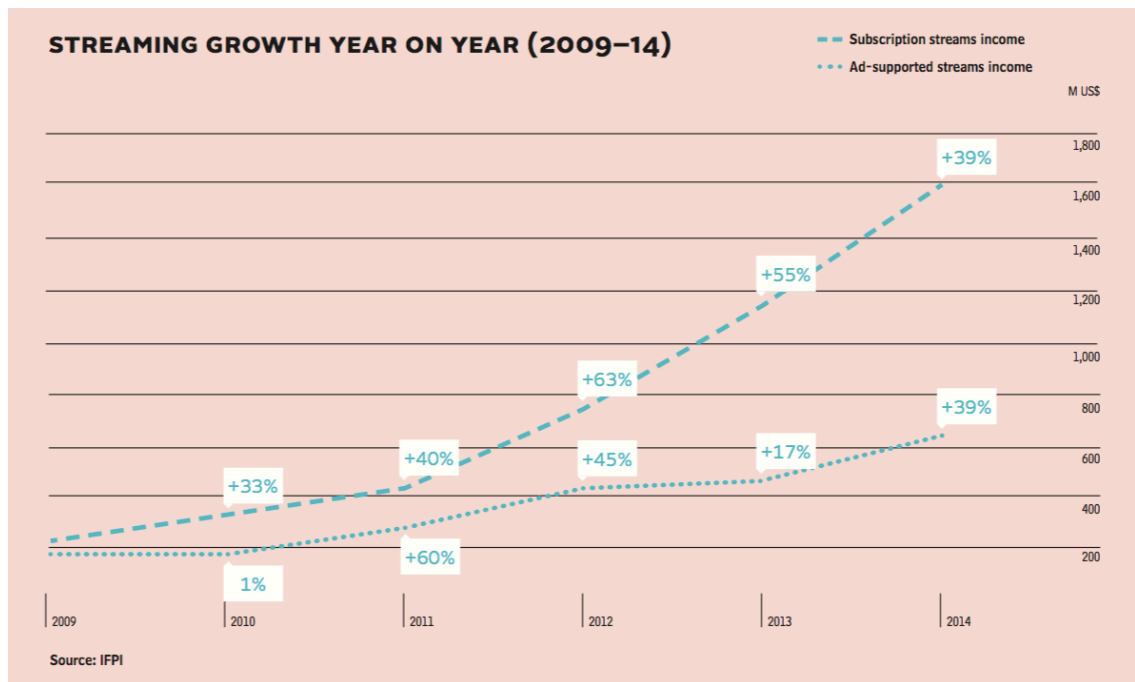


Figure 3.1 Streaming growth year on year. Adopted from IFPI. (2015). *IFPI Digital Music Report*.: IFPI.

The number of paying users of music subscription is estimated at 41 million people worldwide in 2014, which was increased from 28 million users in 2013. This is enormous growth since first collected data in 2010, when there was 8 million paying users (IFPI, 2015). However, according to IFPI, subscription users represent only 16 per cent of music consumer across 13 selected countries, wheher ad-supported stream represents 35 per cent of these consumers (2015).

Additionally, since beginning of 2014, streaming services were integrated into creating single and albums charts. In 2015, there were 16 countries implementing streaming within single charts, including UK (IFPI, 2015).

### 3.1.4 Other platforms

The other favourite platforms, which listeners use to listen to digital music formats are music videos, online radios and social sound platforms. Music video platforms are popular among users, because they are free and easily accessible via web browsers, however they contain advertisements. The most favourite site where people can listen to music videos is YouTube, which largely consists of music related content and with its



more than 1 billion users it plays an important role in music industry (IFPI, 2015). Another platform is online radio, which is also free and accessible via web browser, but a user does not have control a control of the content, however there is enormous number of stations and genres to choose from (Miller, 2012). The example of social sound platform is SoundCloud, where users can can upload and share their songs as well as listen to other users. This platform is mostly used by smaller artist and their audience.

### **3.1.5 Music Piracy**

Music piracy is an easy way of accessing digital music files for free. Music piracy is considered illegal, because it infringes the copyrights of the authors. It is seen as a massive problem for record companies, which, according to them, disrupts sustainable growth of music industry (IFPI, 2015). IFPI estimates that 20 per cent of the Internet users all around the world uses gain access to music via pirate services on regular basis (2015). On top of that, Popham speculates that 70 per cent of downloaded music is are pirate downloads (2011). Record companies are trying to fight music piracy by pushing relations to block specific websites via Internet providers. These efforts lead to blocking 480 pirate websites within 19 countries (IFPI, 2015). However, the most popular servers are sophisticated and use various URL to avoid this situation. Additional effort to fight music piracy was by pushing Google to set lower scores in search results for servers which infringe copyrights (IFPI, 2012). The pirate servers use advertisement on the website to generate income. IFPI identifies that many big companies, such as Barclay Bank, British Airways, Samsung, Unilever, Vodafone and more place an advertisement on pirate servers, in which way, according to record companies, they indirectly finance music piracy (2015).

Music piracy through the Internet is mostly performed via P2P file sharing sites. Nowadays, the most favourite P2P protocol is BitTorrent, which allows its users to link with other users' computers which then share the files among themselves. Miller states that BitTorrent is responsible for 70 per cent of all Internet traffic (2012).

There are many reasons, why to do not pirate music via P2P sites. The first reason is that it is considered to be against the law. People who pirate music put themselves in the risk of prosecution, which could result in prison time and enormous fine (even \$250,000 per song) (Miller, 2012). Another reason, which Miller chooses, is that users who choose to download illegally, take out the profit of the artists, which is especially harmful to smaller artists (2012). Additional reasons listed by Miller are questionable quality of the file and possibility of getting user's computer infected by virus (2012).

However, many people use this way of acquiring music. Some of them find it ethical and some not, which depends on each individual's cognitive effort to distinguish between right or wrong. People who find it unethical can still continue in such behaviour because its advantages suppress their ethical stance (Bonner, O'Higgins). There are many reasons why people use file-sharing services. The most obvious one is that it is for free. In consideration, that one songs costs \$0,99 and a user intend to acquire 100 songs in a month, it creates a significant saving (Miller, 2012). That is possibly the biggest reason why many of high school and university students use pirate services (Miller, 2012). Another reason why people download illegally is that they can choose what format of music they want to download, which is not always a choice when downloading songs from digital stores (Miller, 2012). Additional reason to use pirate services is to acquire music, which is not available anywhere else due to non-availability of digital format in digital stores or due to any kind of geographic restriction (Miller, 2012).

## 4 Research Methodology

Methodology will present the objectives of this research which stands as follows;

RO<sub>1</sub>: Determine the differences between Generation X and Millennials in listening to digital music files.

H<sub>0</sub>: There is no difference in listening to digital music files between Generation X and Millennials.

H<sub>1</sub>: There is a difference in listening to digital music files between Generation X and Millennials.

RO<sub>2</sub>: Determine the differences between Generation X and Millennials in terms of what platform they use to listen to digital music files.

H<sub>0</sub>: There is no difference in terms of what platform is used to listen to digital music files between Generation X and Millennials.

H<sub>1</sub>: There is a difference in terms of what platform is used to listen to digital music between Generation X and Millennials.

RO<sub>3</sub>: Determine the differences of how much are people willing to spend on music monthly between Generation X and Millennials.

H<sub>0</sub>: There is no difference in monthly spending on music between Generation X and Millennials.

H<sub>1</sub>: There is a difference in monthly spending on music between Generation X and Millennials.

RO<sub>4</sub>: Determine the differences in music piracy habits between Generation X and Millennials.

H<sub>1</sub>: There is no difference in music piracy habits between Generation X and Millennials.

H<sub>0</sub>: There a difference in music piracy habits between Generation X and Millennials.

## 4.1 Research Approach

Maylor and Blackmon describes two different research approaches for conducting a research – scientific and ethnographic (2005). Scientific approach asks questions such as “what” and “how much”. For this research, surveys, experiment or databases are being used as measurement methods (Maylor and Blackmon, 2005). This research’s objectives are to analyse consumer behaviour in digital music market and it will examine **what** are consumer’s preferences and habits and **how much** money are they willing to spend for digital music. For this reason, the author has decided to choose scientific approach. Once all data are collected, deductive logic will be used to answer the research question and either prove or disprove the hypothesis. Deductive logic is often connected with quantitative research (Sanders, et al., 2012), on which this research will be built on.

## 4.2 Research Strategy

It was decided, that this research will follow scientific approach. After some consideration, the author has decided that **survey** would be best option for conducting this research. Survey is suitable for gaining facts, behaviour, attitudes and opinions from a large number of respondents. Additionally, surveys tend to be cost and time efficient which offer inexpensive way of collecting primary data which can be used for both, large and small scale research (Denscombe, 2014). This corresponds with the plan on how data for this research were planned to collect. However, survey also has disadvantages, such as they might lack depth or detail. Moreover, there is a risk of low response rate, which can be challenging for a researcher. Also, it might be hard to reach researched population (Denscombe, 2014).

## 4.3 Research Method

Survey offers three different styles of conducting a research – questionnaire, structured interview and structured observation. There are many types of questionnaires, which can vary vastly in terms of its size, purpose and appearance. However, all questionnaires have to fit in following criteria; designed in a way that it can collect data

which are subsequently used for data analysis, it is written list of questions and it asks respondents directly about researched issues (Denscombe, 2014).

Self-completion questionnaire was selected for purpose of this research. Questionnaire is simply the most popular and common way of conducting a research in survey. Self-completion questionnaires allow respondents to answer question independently from the researcher, which gives them possibility to fill questions in their own time and own pace (Denscombe, 2014). Moreover, questionnaire represents economical way of gaining data in relatively inexpensive means in comparison with amount of data obtained. Also, they are easier to arrange than for example interviews (Denscombe, 2014). The reasons listed above contributed in author's decision for choosing a questionnaire. However, questionnaires do not allow the researcher to check the truthfulness of the answers due to fact that researcher is not present when respondents fill the questionnaire (Denscombe, 2014). This might be a problem for this research as it asks about music piracy and people tend to do not admit "immoral" behaviour. Moreover, questionnaire allows to ask only limited number of questions and it is expected to have limited response rate or even missing data due to half-filled questionnaires (Saunders, et al., 2012; Maylor and Blackmon, 2005).

#### **4.4 Population**

This research is focused on two generations – generation X and millennials. Generation X was defined as people who were born between years 1965 and 1979 which was proposed by Crampton and Hodge (2009). For the Millennials, author decided to follow proposition of Bawany, who classify Millennials as people born between 1980 and 1995 (2014). Therefore, Millennials include people with age between 20 and 35, while Generation X account for people between 36 and 51 years old. This research focus on the differences between these two generation in terms of consumption, preferences and attitude on digital music market. People's purchasing and consumption habits are influenced by the time of period in which they were born (Howe and Strauss, 2000). Additionally, it is well known that Generation X differs from Millennials within their characteristics, behaviour and values (Gurău, 2012).

## **4.5 Sampling**

For purpose of this research, the author decided to use non-probability sampling approach. Opposing to probability sampling, where any person can be included in a sample, non-probability approach is the one, where it is not possible (Robson and McCartan, 2016). This approach allows purposeful and systematic selection of answers, while some units have increase possibility of being selected than others.

Robson and McCartan lists five different approaches within non-probability approach (2016). The author decided that the most appropriate approach is quota sampling, which defines characteristics of the sample and even put them into categories. This research consists of comparison of behaviour in digital music market between Generation X and Millennials. Additionally, it also compares behaviour of British and Czech respondents.

The quotas for each generation within each nationality. However, samples within Millennials exceeded the goal more than twice, while Gen Xers are close to it. This leaves Millennials more than double responses, which might negatively influence the results of the research.

## **4.6 Distribution of Questionnaires**

Author has decided to collect primary data via online questionnaire. The benefits of online questionnaire are its wide reach, when large number of potential respondents can be addressed, however, the response rate tend to be much smaller.

Google Forms was used as a platform for collecting data for its free features and simplicity, which stands out in comparison with other online research platforms. The link for fulfilling the questionnaire was sent to various groups on social medias as well as it was sent in message to friends of the author. The author gained large amount of responses very quickly through this distribution channels, however, the vast majority of the questionnaire was filled by student belonging to Millennials generation. Due to a lack of

responses of Gen Xers, author's supervisor distributed the questionnaire to academic workers via email messages. Author also encouraged his friends to hand the questionnaire over to their parents. However, this was not sufficient enough and for this reason, author has decided to approach people in streets with printed version of the questionnaire to increase number of responses.

The overall effort resulted in completion of 229 questionnaires from which 31 had to be discarded due to age which did not fit into specified generations or due to different residency than United Kingdom or Czech Republic.

#### **4.7 Design of Questionnaire**

The questionnaire includes for type of questions – single answer choice, multiple answer choice, rating scales and open answer choice. The questionnaire was created in two versions – English and Czech. Both questionnaires are identical and include 24 questions with little exception of two questions which will be discussed in limitations of the research.

The online questionnaire itself is divided into 10 sections. Google Forms has limited features and it was necessary to create different sections to make it possible to respondents to skip sections to which they do not need to answers according to their previous responses. This solution allows respondents to fulfil questionnaire faster and it does not tend to discourage them to leave the questionnaire in the halfway process because they do not answer to question which they do not relate to. Moreover, this allows questions to be compulsory (with one exception) to prevent the questionnaire from unfilled answers, without felt of discomfort.

The first question of the questionnaire distinguishes people, who do and do not listen do digital music format on their computer or any other device. If the answer is no, the respondent is sent to the last section to fill personal information.

Second section asks respondent about their general habits concerning listening to music such as how often they listen to music, during which activities, on which devices, plus there is a question regarding the Internet habits.

Another part distinguishes people who do and do not have digital music collection, when respondents answering “yes” are asked additional questions regarding the size of their digital music collection and frequency of editing it.

Next section asks about digital music preferences which includes questions such as the platforms used to listen to digital music content and respondents approach towards payments for digital music.

Further section examines respondent’s attitude towards music piracy. Respondent who answer that they do pirate music, are asked what are the reasons to do so, frequency and it includes only open question in the questionnaire, which is not compulsory, asking what would make them stop in doing so. On the other hand, respondents who say no, are asked what are their concerns to do now pirate music. Additionally, this section also provides option “Prefer not to say”, because some respondent might not feel safe or well to answer such a question. Some people might tend to not answer truthfully such a question as well. However, author reassures respondent in the introduction of the questionnaire that the questionnaire is anonymous and will be used only for purpose of this research. Additionally, author encourage respondents to answer truthfully.

Following sections includes rating scale questions to get respondents’ opinion on variety of statement concerning digital music files, music streaming, music piracy and adverts when listening to music. Joshi et al. discuss the use of 5-point and 7-point Likert scales and say that 7-point Likert scale might perform better due to providing more varieties (2015). However, Leung’s research does not find any differences between 4-, 5-, 6- and 11-point Likert scales which would have effect on the resulted data (2012). Author firstly considered 6-point chart, however, after consideration that older generation might not be familiar with all the terms in digital music environment, it was decided to



use scale with neutral point. Therefore, author decided to use 5-point Likert scale to simplify the questionnaire.

Last section of the questionnaire includes personal questions to determine respondent's gender, age, country of residence, highest level of qualification and employment status.

Both questionnaires can be found in appendices. English version as Appendix B and Czech version as Appendix C.

## **4.8 Pilot Study**

Robson and McCartan believe that the pre-test of the questionnaire is best tested informally within colleagues, friends and family (2016). The pilot study prevents mistakes or incomprehension which could be made by author. Absence of pilot study might lead into low response rating and other problems connected with collecting data.

The first draft was printed and given to author's classmates, flatmates and supervisor. Author was watching as interviewers were filling the questionnaire and was answering any questions which respondents might have. After fulfilling the questionnaire author has collected feedback to improve the questionnaire and create a final form.

The first question "Have you ever listen to digital music format (such as MP3) on your computer, mobile phone or any other device? Or have you ever listen to the radio on the Internet?" was changed, because it included double question, which might cause contradiction when respondent have different answer for each of those questions. Author has decided to leave the second part of the question completely.

Moreover, second question was changed from "hour per day" to "hours per week" since some respondents remarked that their consumption of music differ from day to day. Additionally, questions including music piracy included phrase "download illegally" which was changed to "download music without copyright", because it might resolve in

getting less truthful answer as it sounds more unlawful. Also, the illegality depends on each country and it is hard to define exactly.

Another change was with Likert scales. Author's original intention was to have 6-point Likert scales to do not neutral answers and push respondents more to think about each statement. However, after consideration that some respondents, especially older generation, might not be familiar with all terms included in statements and could feel discomfort while fulfilling answers, the author has decided to change scale to 5-point Likert scale, which allows respondents with option of neutral answer.

The draft of questionnaire included question about annual income in the last section. After conducting the pilot, author has decided to leave this question completely, because some people do not feel comfortable to share such information or might even give untruthful answer.

Additionally, the author has decided to change the structure of the questionnaire in a way, that respondent can skip questions, which do not relate to them according to previous answers. This lead into dividing online questionnaire into 10 different sections. Pilot study can be found in appendices as Appendix D.

## **4.9 Limitations of Research**

The research focuses only on Generation X and Millennials, which age range is defined in literature review. Additionally, these generations' samples are not equal as the Millennials' sample is twice bigger, due to author found that approaching Gen Xers was more difficult, especially to the nature of online questionnaire. Additionally, for the distribution of the questionnaires, various channels were used. Questionnaire was posted on Facebook groups of Huddersfield University students, Huddersfield University Muay Thai society and Czech university – VSB-TUO students. Additionally, the questionnaire was sent via email to academic workers and students within University of Huddersfield. Author also sent the questionnaire to family members to help with distributing questionnaire within their colleagues and friends, as well the author sent the questionnaire

to various friend and asked for help with the distribution within their parents and friends. Furthermore, the author approached people in the streets of Huddersfield city centre. The British sample consists of academic workers and students of University of Huddersfield and residents of Huddersfield. The Czech sample consists of University students of VSB-TUO, their parents and friends as well as family of the author, which are most vastly from city of Ostrava. These circumstances will possibly make the research non-representative as its results might not represent both, United Kingdom and Czech Republic as a whole. Moreover, the questionnaire includes a questions regarding music piracy. Music piracy is very controversial topic and is considered as unlawful. For this reason, it is possible that some respondents will not answer truthfully, which might influence the result of this research.

Additionally, question “How much are you willing to pay for your digital music?” does not represent the exact same values in answer between British and Czech sample. This is caused by different currencies used in both countries. The author has decided to approximate the options so they are more appealing to respondents, rather than creating exact same value through current exchange rate. The possible answers are, however, very close to its current exchange rate and the difference is not striking. Another difference in questionnaire when the highest qualification achieved is asked. There is not equivalent to undergraduate in Czech Republic and undergraduate students belong to secondary level of education. Due to several limitations of this research, it is recommended to take its results with care.

#### **4.10 Profile of Respondents**

From all distributed questionnaire, 198 answers were collected, from which 74 are males and 124 are females (Table 4.1)

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	74	37,4	37,4	37,4
	Female	124	62,6	62,6	100,0
	Total	198	100,0	100,0	

*Table 4.1 Profile of respondents according to gender*

As shown in a Table 4.2, Millennials (age 20 – 35) represents 137 responses which accounts for 69,2 per cent. Gen Xers constitute of 61 responses, responsible for 30,8 per cent of total number of answers. The big difference between percentage of each generation is caused by author's struggle to acquire responses from Generation X, due to they tend to be harder to approach via the Internet, and method, such as personal approach is more recommended. On the other hand, the author did not expect to gain that many responses from Millennials by posting the questionnaire on social medias.

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 - 35	137	69,2	69,2	69,2
	36 - 51	61	30,8	30,8	100,0
	Total	198	100,0	100,0	

*Table 4.2 Profile of respondents according to Age*

However, the ration between British and Czech respondents are rather similar. United Kingdom represent 47 per cent of answers, while Czech Republic stands for 53 per cent of all responses (Table 4.3).

### Country of residence

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid United Kingdom	93	47,0	47,0	47,0
Czech republic	105	53,0	53,0	100,0
Total	198	100,0	100,0	

Table 4.3 Profile of respondents according to country of residence

The most responses were made by people with secondary education (40, 9 per cent), followed by undergraduate degree and postgraduate qualification with the same portion (22, 7 per cent) (Table 4.4). However, the number of people who identify themselves as undergraduate should be higher, since the undergraduate student from Czech identify themselves as people with secondary education. This is more explained in limitation of the research.

### Highest level of qualification

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Primary education	3	1,5	1,5	1,5
Secondary education (GSCE)	24	12,1	12,1	13,6
Secondary education (A-level)	81	40,9	40,9	54,5
Undergraduate degree	45	22,7	22,7	77,3
Postgraduate qualification	45	22,7	22,7	100,0
Total	198	100,0	100,0	

Table 4.4 Profile of respondents according to qualification

Students represents 61,1 per cent of the sample, followed by full time employed people who are responsible for 25,3 per cent of the responses (Table 4.5).

### Employment status

		Responses		Percent of Cases
		N	Percent	
Employment status	Student	121	56,8%	61,1%
	Full time employed	50	23,5%	25,3%
	Part time employed	28	13,1%	14,1%
	Unemployed	7	3,3%	3,5%
	Self-employed	6	2,8%	3,0%
	Other	1	0,5%	0,5%
Total		213	100,0%	107,6%

*Table 4.5 Profile of respondents according to employment*

## 5 Research Findings

In previous section, approach, strategy, methods, sampling, distribution and design of the questionnaire were discussed. This section of the research presents results of the collected primary data. Software IBM SPSS Statistics was used for the purpose of the data analysis.

The author decided to use  $p=,05$  as the statistically significant difference for analysis of the data, when conducting Chi-square, ANOVA, T-test or correlation using IBM SPSS Statistics software. This determine, whether there is a relationship between factors. When calculated significance  $\text{Sig} < ,05$  then there is statistically significant difference. If  $\text{Sig} > ,05$  then it is statistically non-significant difference, therefore the relationship between variables is not proven.

Additionally, the author generated descriptive statistics of each answer of the questionnaire to better understand the results of the research. All descriptive statistics is included in appendices as Appendix A.

### 5.1 General Findings

#### 5.1.1 *Frequency of Listening to Music*

The author of the research wanted to analyse if there is a relationship between the age and frequency of listening to music. The results show that 51,2 per cent of Generation X (age 36-51) listen less than 5 hours per week. This is more than a twice of the same hours than Millennials (age 20-35). Also, Millennials who listen to music more than 20 hours per week consists of 20,7 per cent of the sample, nearly twice as Generation X (Figure 5.1). The author used Chi-square test, to analyse if there is relationship between frequency of listening to music and generation. After conduction of the Chi-square test,  $\text{Sig} = ,026$  was found, which shows statistically significant difference at  $p = ,05$  (Table 5.1). This indicates, that there is a relationship between frequency of listening to music and generation.

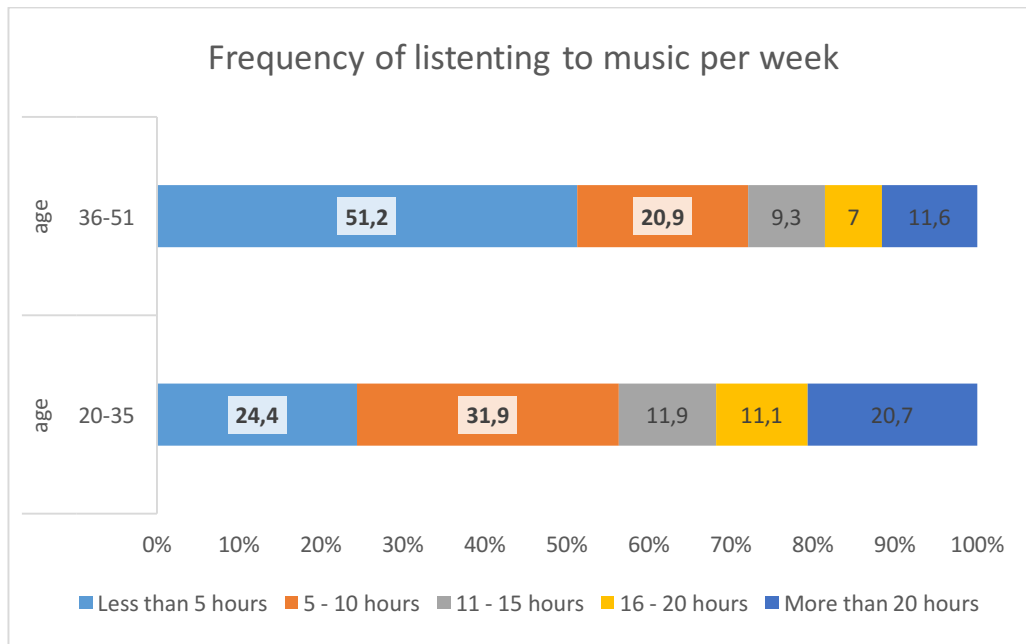


Figure 5.1 Frequency of listening to music according to age

#### Chi-Square Tests - Frequency of Listening to Music

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11,067 <sup>a</sup>	4	,026
Likelihood Ratio	10,572	4	,032
Linear-by-Linear Association	6,264	1	,012
N of Valid Cases	178		

a. 2 cells (20,0%) have expected count less than 5. The minimum expected count is 4,35.

Table 5.1 Chi-square test frequency of listening to music/age

#### 5.1.2 Activities when Listening to Music

The author of the research conducted a question – during which activities respondents listen to music. The results show that most people listen to music, while relaxing (78,1 per cent), followed by driving (60,1 per cent), exercising (56,7 per cent). Another activities are “with friends” (44,9 per cent), working (41 per cent), studying (38,8



per cent) and other (20,8 per cent) which included one significant activity – travelling, with 14 respondents (Figure 5.2).

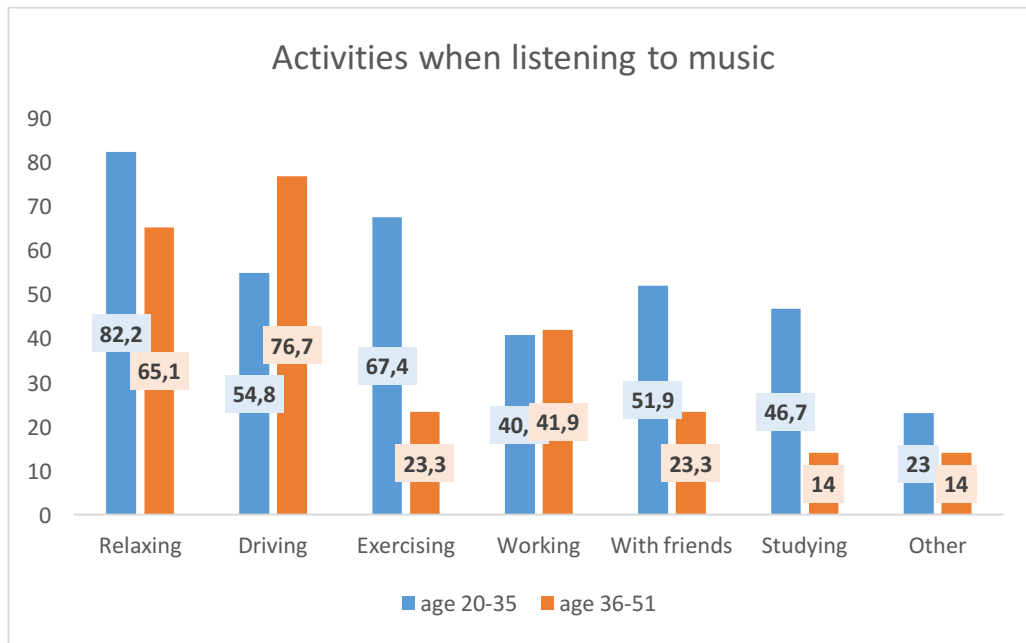


Figure 5.2 Activities while listening to music according to age

### 5.1.3 Devices to Listen to Music

One the questions researched what devices people use to listen to music. The most people use PC or laptop (74,7 per cent) and smartphone (73 per cent). These are followed by car stereo (48,9 per cent) and radio (42,7) per cent. Only 7,9 per cent of respondents answered that they use MP3 player for listening to music (Figure 5.3). This might be caused by increasing number of smartphones, which can replace MP3 player's functions.

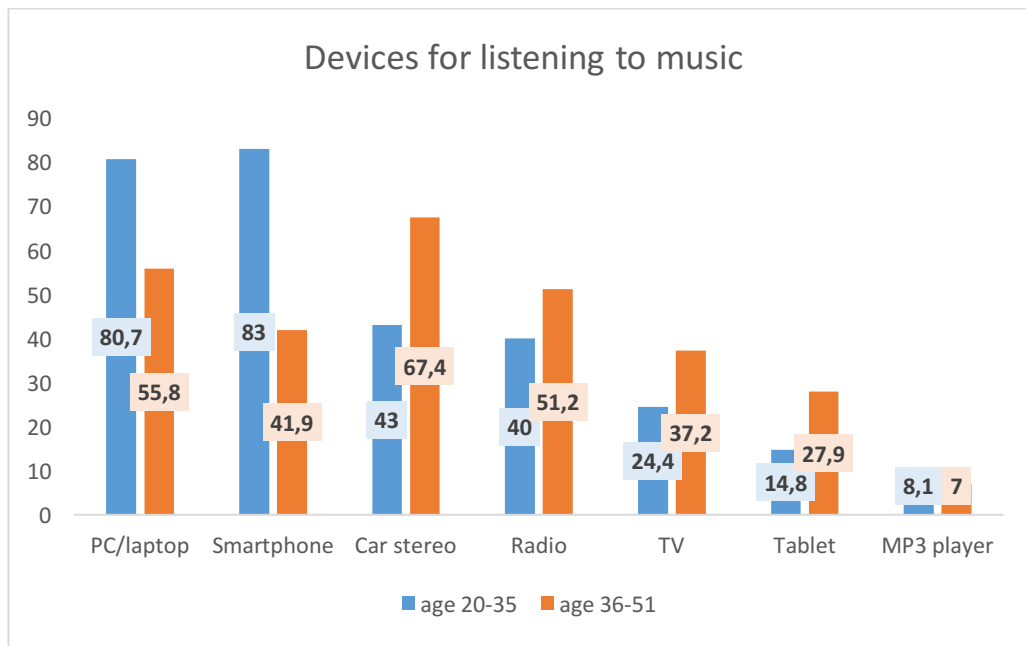


Figure 5.3 Devices used to listen to music according to age

#### 5.1.4 Frequency of the Internet usage

The Internet plays crucial role on digital music market. For that reason, the author asked respondents a question about their Internet habits. The Millennials (age 20-35) use the Internet more often than Generation X (age 36-51). 80 per cent of Millennials use the Internet several times per day and 18,5 per cents stated that they use it daily. Only 1,5 percent of Millennials stated that they use the Internet several times per week. However, the difference is not as high as the author expected. More than 50 per cent of Gen Xers use the Internet several times per day and 39,5 per cent daily. Both, several times per week and less frequently acquired 4,7 per cent (Figure 5.4). The Chi-square test was constructed to determine whether there is relationship between the frequency of the Internet usage and generation. The results show significance of Sig=,001 which indicates that there is a relationship between these two factors as  $p=,05$  (Table 5.2).

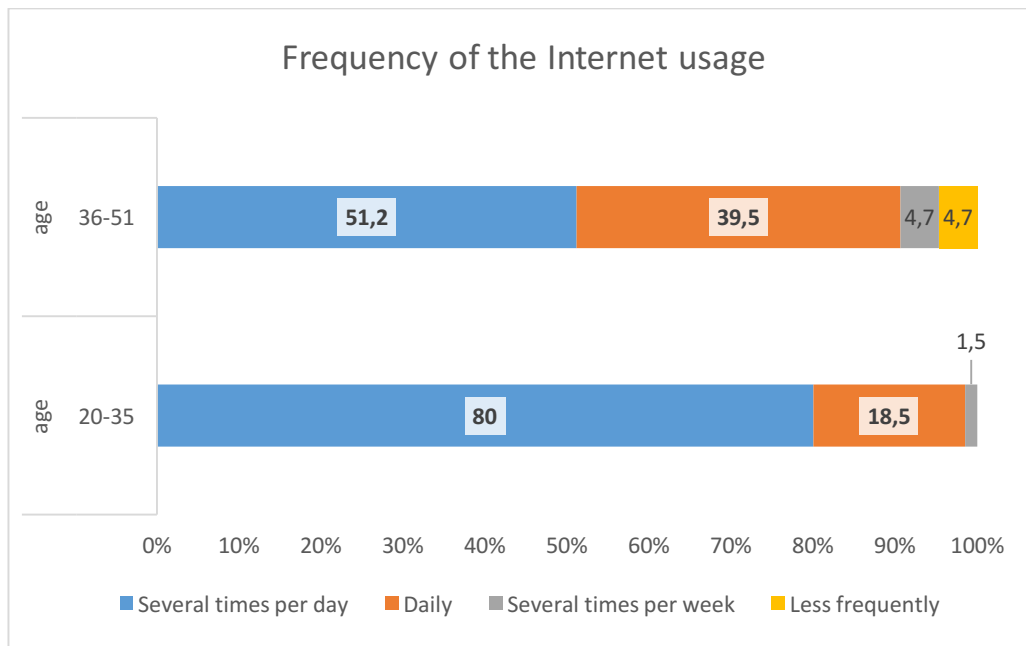


Figure 5.4 Frequency of the Internet usage

#### Chi-Square Tests - Internet Usage

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	17,555 <sup>a</sup>	3	,001
Likelihood Ratio	16,378	3	,001
Linear-by-Linear Association	17,149	1	,000
N of Valid Cases	178		

a. 4 cells (50,0%) have expected count less than 5. The minimum expected count is ,48.

Table 5.2 Chi-square test the Internet usage/age

## 5.2 Digital Music Listeners

The first research objective is whether there is a difference in listening to digital music format across generations. This research objective stands:

RO<sub>1</sub>: Determine the differences between Generation X and Millennials in listening to digital music files:

H<sub>0</sub>: There is no difference in listening to digital music files between Generation X and Millennials.

H<sub>1</sub>: There is a difference in listening to digital music files between Generation X and Millennials

The Millennials (age 20-35) who answer that they listen to digital music frequently or not so often counts for 98,5 per cent of the sample, whether Generation X (age 36-51) counts for 70,5 per cent, when majority of respondent do not listen to digital music format frequently (41 per cent). Out of 29,6 per cent of Gen Xers, who do not listen to digital music, only 6,6 per cent plan to do so in the future (Figure 5.5).

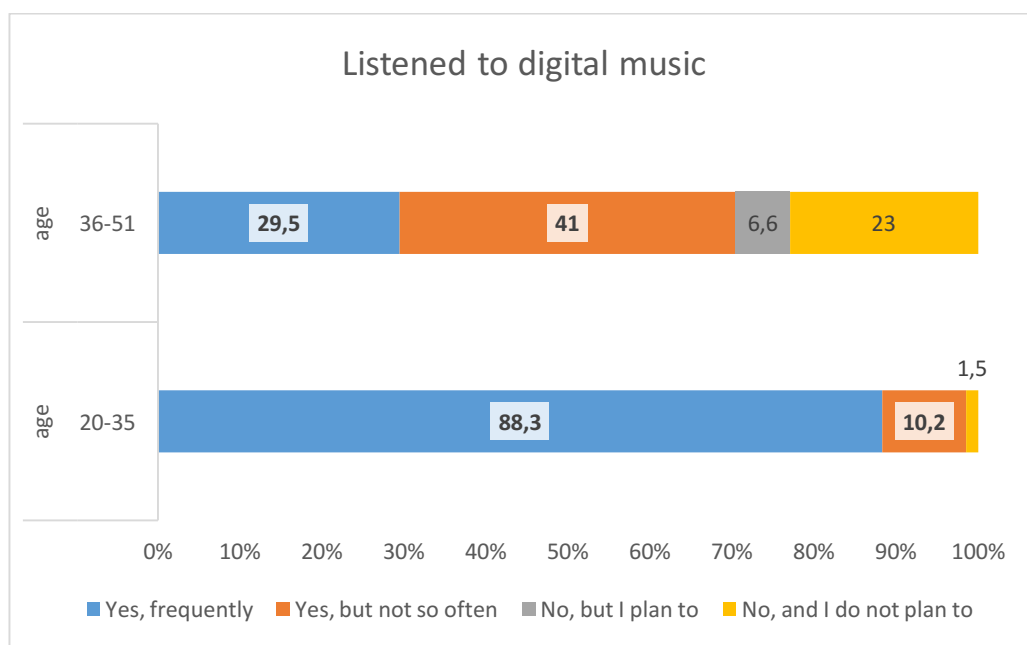


Figure 5.5 Listening to digital music according to age

To prove or disprove RO<sub>1</sub>, the author conducted one-way ANOVA test between stated generations. The test showed that there is a statistically significant difference between the generations as  $F(3,194) = 38,745$ ,  $\text{Sig} = ,000 < 0,5$  (Table 5.3) Therefore, the H<sub>0</sub> is rejected and H<sub>1</sub> is accepted.

## ANOVA

Age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.814	3	5.271	38.745	.000
Within Groups	26.393	194	.136		
Total	42.207	197			

Table 5.3 ANOVA test for age/digital music listening

Additionally, the author has decided to compare whether listening to digital files differ in United Kingdom and Czech Republic. The residents of United Kingdom listen to digital music more, with combined percentage of frequent and not frequent answers of 94,6 per cent compared to 85,7 per cent of Czech residents. However, Czech had higher result in listening to digital music frequently with 71,4 per cent compared to 68,8 per cent to UK (Figure 5.6).

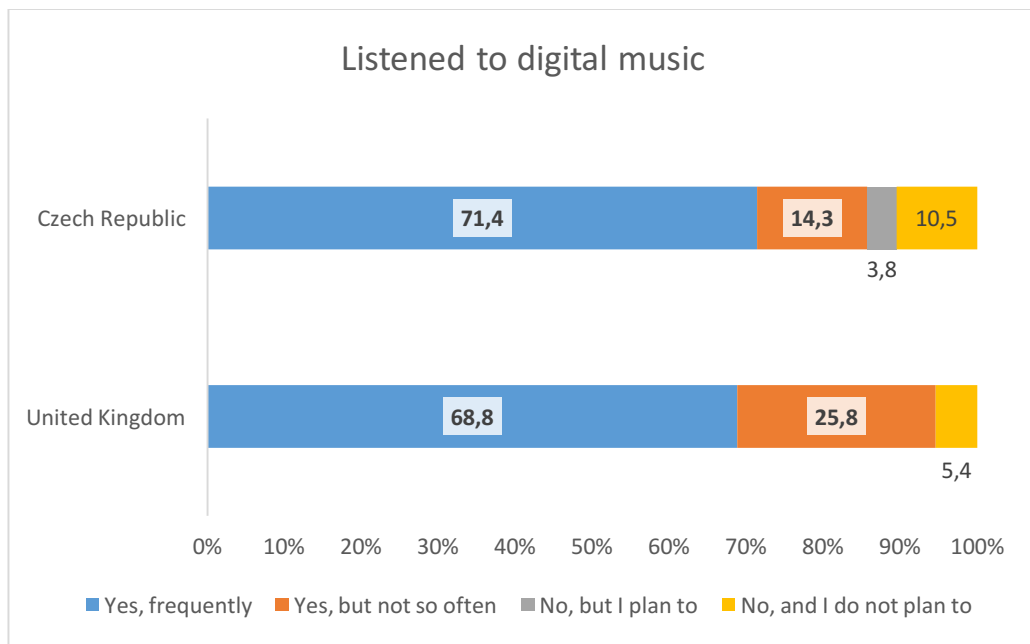


Figure 5.6 Listening to digital music according to country

The author has decided to test, if there is relationship between country and listening to digital music files by conducting one-way ANOVA test. The results showed significance Sig=,037 which indicates that there is a relationship as  $p=,05$  (Table 5.4)

### ANOVA

Country of residence

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,118	3	,706	2,901	,036
Within Groups	47,201	194	,243		
Total	49,318	197			

*Table 5.4 ANOVA Test for country/digital music listening*

## 5.3 Digital Music Platforms

Second research objective analyses the platform, which listeners of digital music use to access songs and whether there is a difference in platform used within stated generations. This research objective stands as follow:

RO<sub>2</sub>: Determine the differences between Generation X and Millennials in terms of what platform they use to listen to digital music files.

H<sub>0</sub>: There is no difference in terms of what platform is used to listen to digital music be files between Generation X and Millennials.

H<sub>1</sub>: There is a difference in terms of what platform is used to listen to digital music between Generation X and Millennials.

Firstly, the comparison between generations on what platform they use to digital music examined. The most favourite platform for digital music in both generations are Music videos with 85 per cent of Millennials (age 20-35) and 76,7 per cent of Gen Xers (age 36-51). The second most favourite platform of Millennials are pirate download with 61,7 per cent. This differ significantly from Generation X as 27,9 per cent stated that they use pirate downloads. The Generation X exceeded Millennials only in use of digital stores (23,3 compared to 21,8 per cent) and online radios (32,6 compared to 24,8 per cent). The

use of streaming services differs the most across generations. Millennials use these services is more than triple with 36,8 per cent compared to 11,6 per cent from Generation X (Figure 5.7).

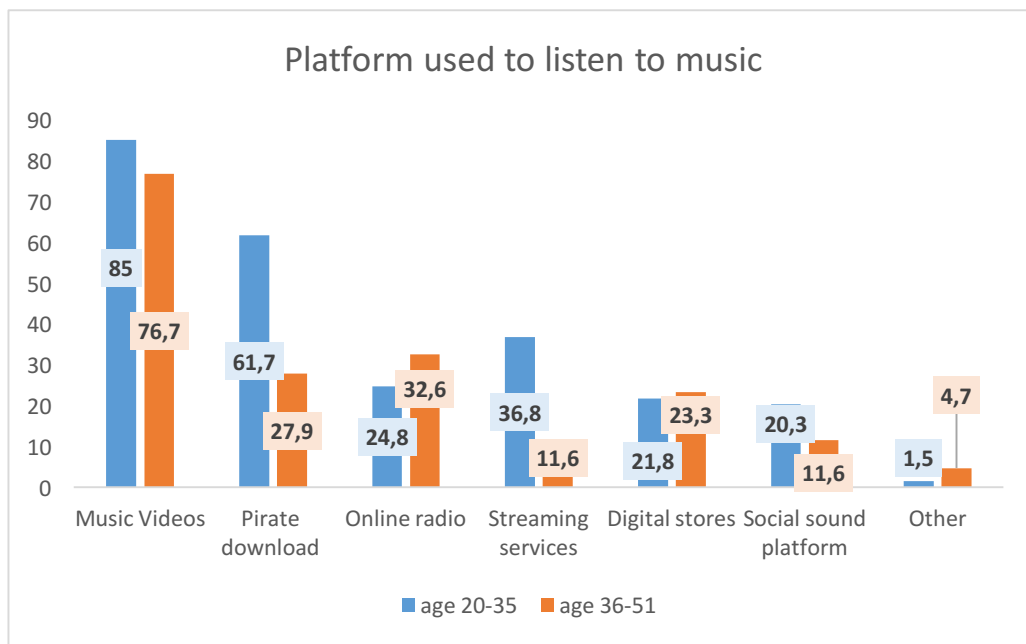


Figure 5.7 Platform for listening to digital music according to age

To determine, whether there is a relationship between stated generations and platform used to listen to digital music, the author conducted Pearson correlation. The results show that only subscription services (Sig=,002) and pirate downloads (Sig=,000) have statistically significant difference as  $p=,05$  between the generations. Digital stores, music videos, online radios and social sound platform do not have a link to the generations as their  $\text{Sig} \geq 0,5$  (Table 5.5). Based on the results of the test, neither the  $H_0$  and  $H_1$  could be accepted for  $RO_2$ , because there is a conflict within the research objectives as different platform could be accepted and some not. Potentially, the  $H_0$  could be rejected and  $H_1$  accepted in a case of music streaming and music piracy. Therefore, also potentially,  $H_0$  would fail to be rejected in case of digital stores, music videos, online radios and social sound platforms.

		Correlations						
		Digital stores	Streaming services	Music videos	Online radios	Social sound platform	Pirate download / copy	Other
Age	Pearson Correlation	.015	-.235	-.094	.075	-.097	-.291	.091
	Sig. (2-tailed)	.843	.002	.215	.321	.202	.000	.231
	N	176	176	176	176	176	176	176

Table 5.5 Age/platform for listening to digital music relationship

Secondly, the author decided to compare preferences of platforms used to listen to digital music between two countries – United Kingdom and Czech Republic. The results show that the percentage of UK residents who use digital stores is more than double with 29,9 per cent compared to 14,6 percent of Czech residents. The same tendency applies to music streaming, 42,5 per cent of Brits stated to use streaming services compared to 19,1 per cent of Czechs. On the other hand, 91 per cent of Czech residents use music videos websites platform for accessing digital music with compared to 74,7 percent of Brits. Also, the Czechs use more pirate downloads (61,8 per cent) than British residents (44,8 per cent) (Figure 5.8).

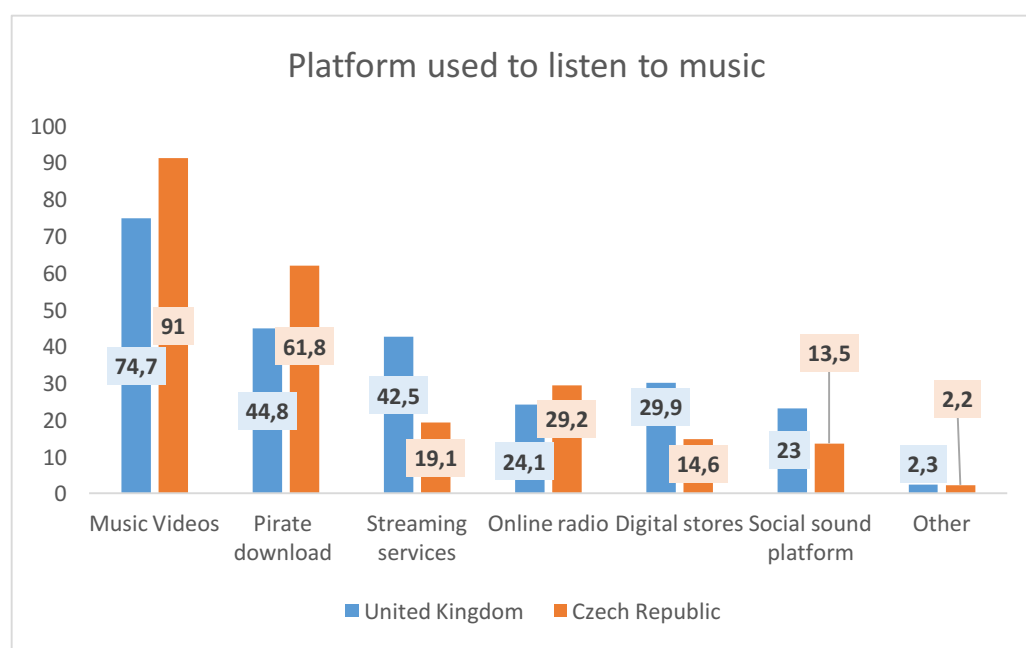


Figure 5.8 Platform for listening to digital music according to country

To determine whether there is a relationship between platform used to listen to digital music and country of residence, the Pearson correlation was performed. The results



show that there is non-statistically significant difference only for online radios (Sig=,450) and other (Sig=,982) when compared to two countries. Digital stores, streaming services, music videos, social sound platform and pirate downloads has statistically significant difference as their Sig= $\leq$ ,05 when  $p=$ ,05 (Table 5.6). Therefore, there is a relationship between the countries and platform used for digital music with exception of online radios and other.

		Correlations						
		Digital stores	Subscription services	Music videos	Online radios	Social sound platform	Pirate download/copy	Other
Country of residence	Pearson Correlation	-,184	-,254	,217	,057	-,123	,170	-,002
	Sig. (2-tailed)	,015	,001	,004	,450	,103	,024	,982
	N	176	176	176	176	176	176	176

Table 5.6 Residency/platform for listening to digital music relationship

The respondents were also asked, which of these platform they use the most. Millennials' most preferred platform are music video websites (35,6 per cent) followed by pirate downloads (28,9 per cent) and streaming services (23 per cent). Gen Xers most popular platforms is also music video websites (41,9 per cent) followed by online radios (16,3 per cent and music piracy (16,3 per cent) (Figure 5.9).

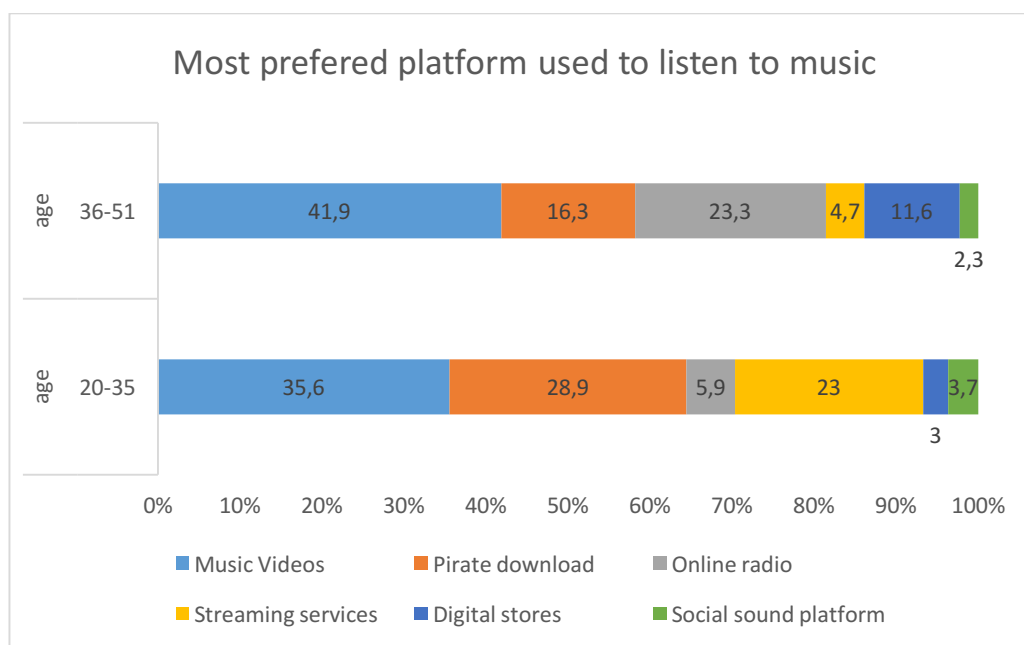


Figure 5.9 Most preferred platform according to age

## 5.4 Payment for Digital Music

The third research objective examines whether there is a relationship between how much are respondent willing to pay for digital music monthly and the generations – Millennials and Gen Xers. The research objective stands as follow:

RO<sub>3</sub>: Determine the differences of how much are people willing to spend on music monthly between Generation X and Millennials.

H<sub>0</sub>: There is no difference in monthly spending on music between Generation X and Millennials.

H<sub>1</sub>: There is a difference in monthly spending on music between Generation X and Millennials

In the first place, the relationship between the generations and willingness of monthly payment for digital music will be examined. The most preferred option for both generations is no payment. However, they both differ vary significantly, when 40,7 per cent of Millennials and 76,7 percent of Gen Xers stated that they do not will to pay for music. There are more Millennials (25,2 per cent) who are willing to pay £1 - £2,99 monthly than Gen Xers (7 per cent). The same apply to £3 - £4,99 when Millennials have 19,3 per cent and Generation X has 7 per cent (Figure 5.10).

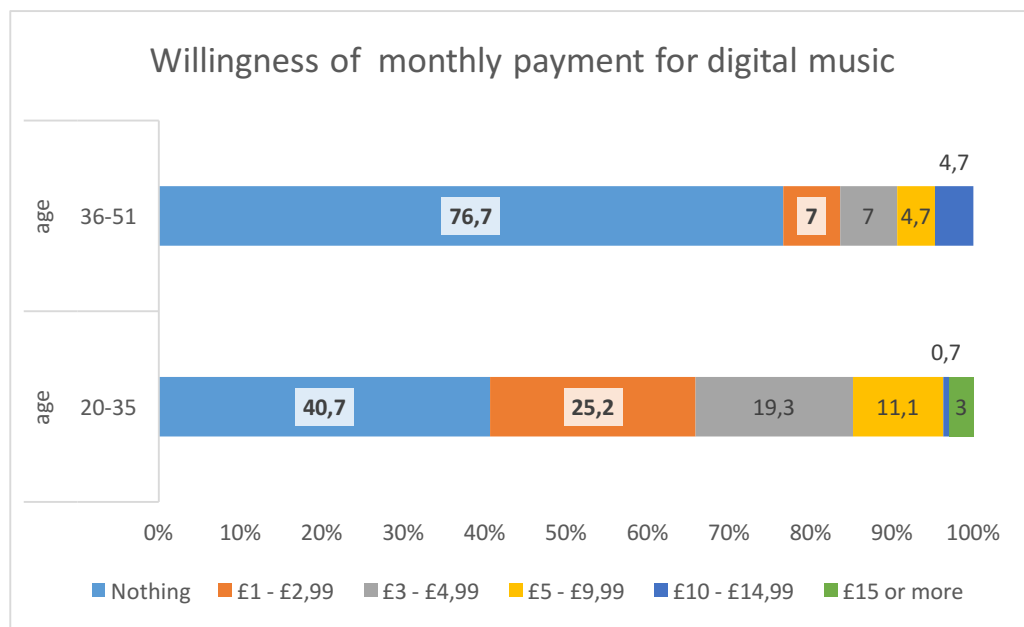


Figure 5.10 Monthly willingness to pay according to age

To determine, whether there is a statistically significant difference between how much are respondent willing to pay monthly for digital music and the generations, the Pierson correlation was examined. The results showed that there is a relationship between monthly amount which respondents are willing to pay for digital music as Sig=,005 when  $p=,01$  (exception according to results) (Table 5.7). Therefore, the  $H_0$  is rejected and  $H_1$  is accepted for RO<sub>3</sub>.

**Correlations**

		Montly spending	Age
Montly spending	Pearson Correlation	1	-.211**
	Sig. (2-tailed)		.005
	N	178	178
Age	Pearson Correlation	-.211**	1
	Sig. (2-tailed)	.005	
	N	178	198

\*\* . Correlation is significant at the 0.01 level (2-tailed).

*Table 5.7 Relationship willingness to pay/age*

Additionally, the author has decided to compare monthly willingness to pay for digital music to the countries – United Kingdom and Czech Republic. The results show that 52,2 per cent of Czechs and 46,6 of Brits are not willing to pay for the music. There are 32,2 per cent of Czech people who are willing to pay £1 - £2,99 compared to 9,1 per cent of Brits. British resident who are willing to pay £3 - £4,99 per month stands for 21,6 per cent compared Czechs, which represents 11,1 per cent. The biggest difference is between the choice of £5 - £9,99 per month, where 17 per cent of United Kingdom and 2,2 per cent of Czech residents chose that option (Figure 5.11).

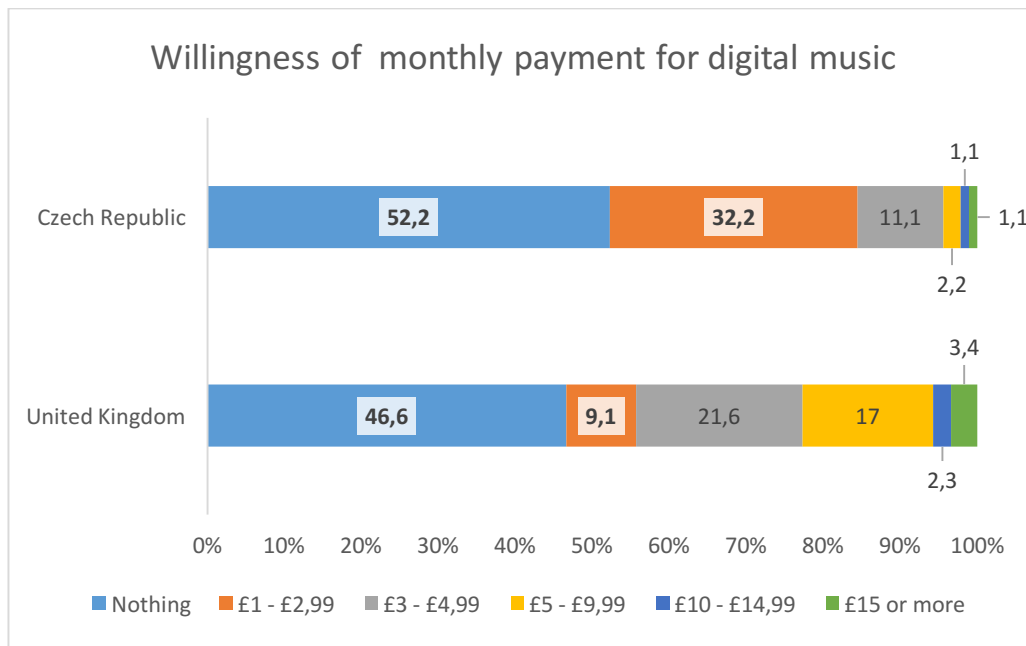


Figure 5.11 Willingness to pay according to countries

To determine, whether there is a statistically significant difference between amount which respondents are willing to spend and counties, the T-test was conducted. The results show statistically significant difference of Sig=,002 when  $p=,05$  (Table 5.8). This outcome demonstrates, that there is a relationship between respondents' amount of money, which are they willing to pay monthly and the countries.

### Correlations

		Montly spending	Country of residence
Montly spending	Pearson Correlation	1	-,235**
	Sig. (2-tailed)		,002
	N	178	178
Country of residence	Pearson Correlation	-,235**	1
	Sig. (2-tailed)	,002	
	N	178	198

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 5.8 Relationship willingness to pay/country

## 5.5 Music Piracy Habits

The fourth research objective examines, whether there is a relationship between the music piracy habits and the selected generations – Millennials and Generation X. The research objective stands as follow:

RO<sub>4</sub>: Determine the differences in music piracy habits between Generation X and Millennials.

H<sub>1</sub>: There is no difference in music piracy habits between Generation X and Millennials.

H<sub>0</sub>: There a difference in music piracy habits between Generation X and Millennials.

Firstly, the author decided to analyse music piracy habits between two generations – Millennials and Generation X. The percentage of Millennials who stated that they download music without copyright frequently and not so often combined, counts for 77 percent when on the other hand, Generation X counts for 37,3 per cent, which is less than half. Millennials who answered that they download digital music without copyright represent 43,7 per cent. Almost half (48,8 per cent) of the Gen Xers stated that they do not download music without copyright and do not plan so. Both generations had similar percentage of respondents, which preferred not to say option (11,9 and 11,6 per cent) (Figure 5.12).

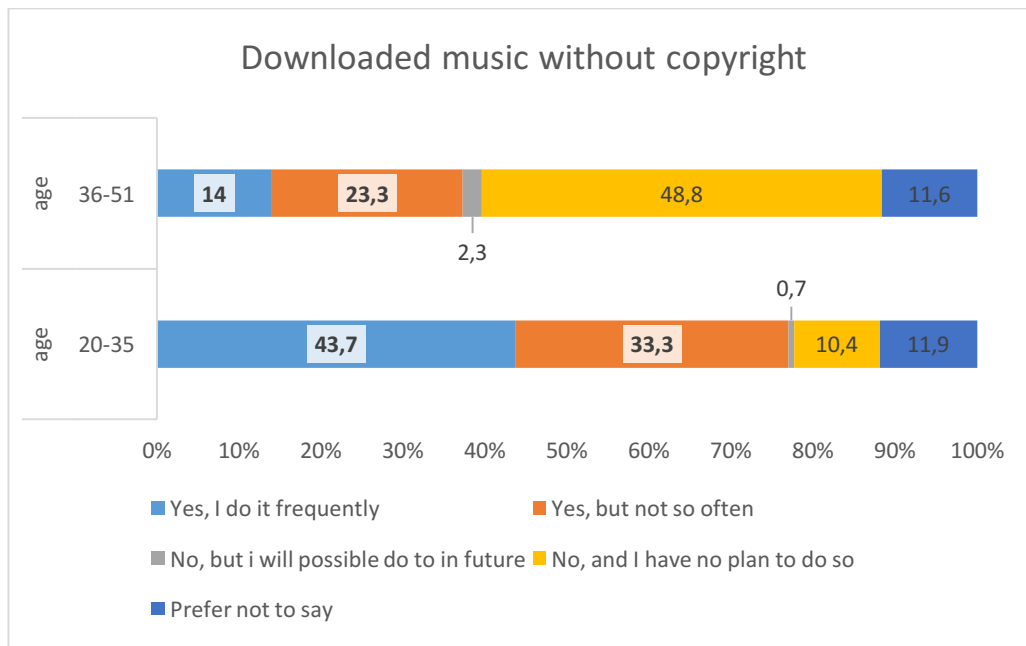


Figure 5.12 Music piracy according to age

To prove or disprove RO4, the one-way ANOVA test was conducted to see, if there is a statistically significant difference between music piracy habits and generations. The test revealed that there is statistically significant difference between the generations as  $F(1,176) = 20,093$ ,  $Sig = .000$  when  $p = .05$  (Table 5.9). Therefore, the  $H_0$  is rejected and  $H_1$  is accepted for RO4.

### ANOVA

Downloaded music without copyright

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	37.756	1	37.756	20.093	.000
Within Groups	330.716	176	1.879		
Total	368.472	177			

Table 5.9 ANOVA test for music piracy/age

Additionally, the author has decided to analyse the music piracy habits between two countries – United Kingdom and Czech Republic. The results show that 45,6 per cent of Czechs stated, they they download music without copyright frequently, compared to

Brits with 27,3 per cent. On the other hand, more British people (36,4) admitted that they do download music without copyrights, but not so often, compared to 25,6 per cent of Czechs. More Brits (26,1 per cent) do not pirate music, but plan to do so in future. Czech people who decided to do not make a statement on this matter counts for 15,6 per cent compared Brits with 8 per cent (Figure 5.13).

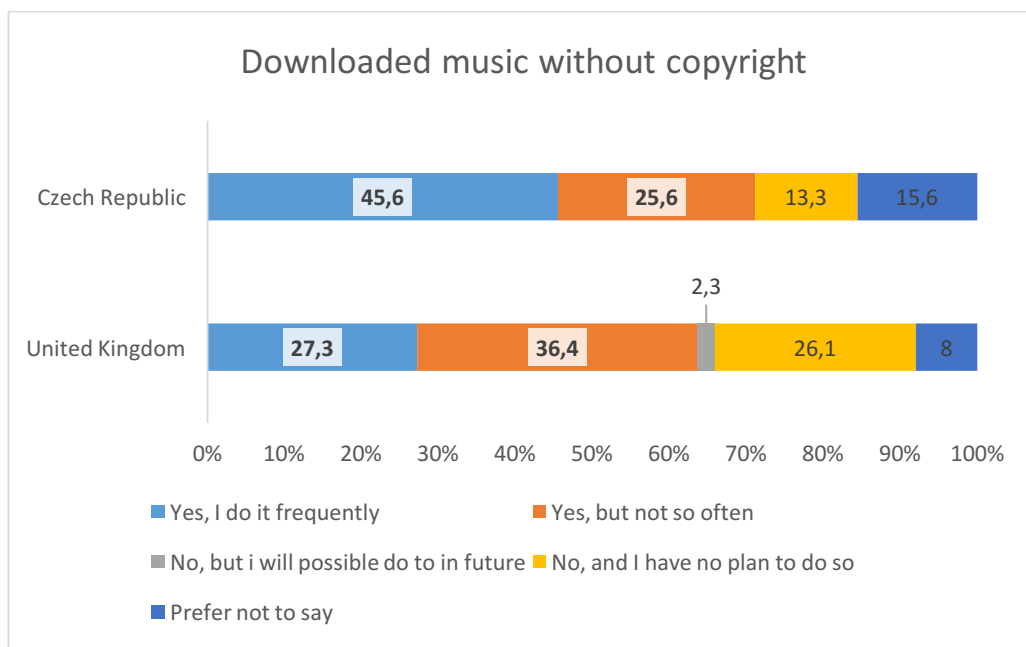


Figure 5.13 Music piracy according to country

The author has decided to test, whether there is relationship between music piracy habits and countries by conducting Chi-square test. The results showed significance Sig=,008 which indicates that there is a relationship as  $p=,05$  (Table 5.10).

## ANOVA

Country of residence

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3,422	4	,855	3,603	,008
Within Groups	41,073	173	,237		
Total	44,494	177			

Table 5.10 ANOVA test for music piracy/country

Respondents, which answered that they download music without copyright frequently or not so often were asked what are their reasons for doing so. The most frequent reason was that they cannot afford level services (43,3 per cent), followed by statement that it is socially acceptable (36,7 per cent). Additionally, 26,7 per cent of respondent stated that “artist have plenty of money from other revenue sources” (Figure 5.14).

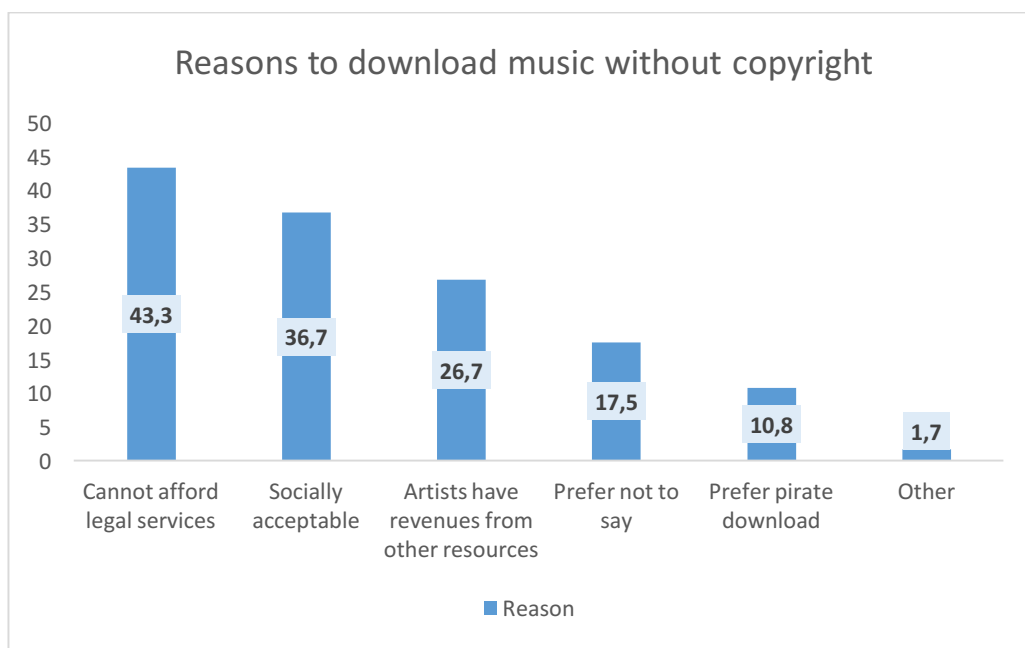


Figure 5.14 Reasons for music piracy

On the other hand, respondent who answered that they do not or that they do not but plan to download music without copyright, were asked what are their concerns in this matter. There were three most often reasons – possibility of viruses, illegality and lack of know-how which all collected 40,5 per cent. The other reasons with high representation were prosecution (27 per cent) and that artist are not paid (27 per cent) (Figure 5.15).



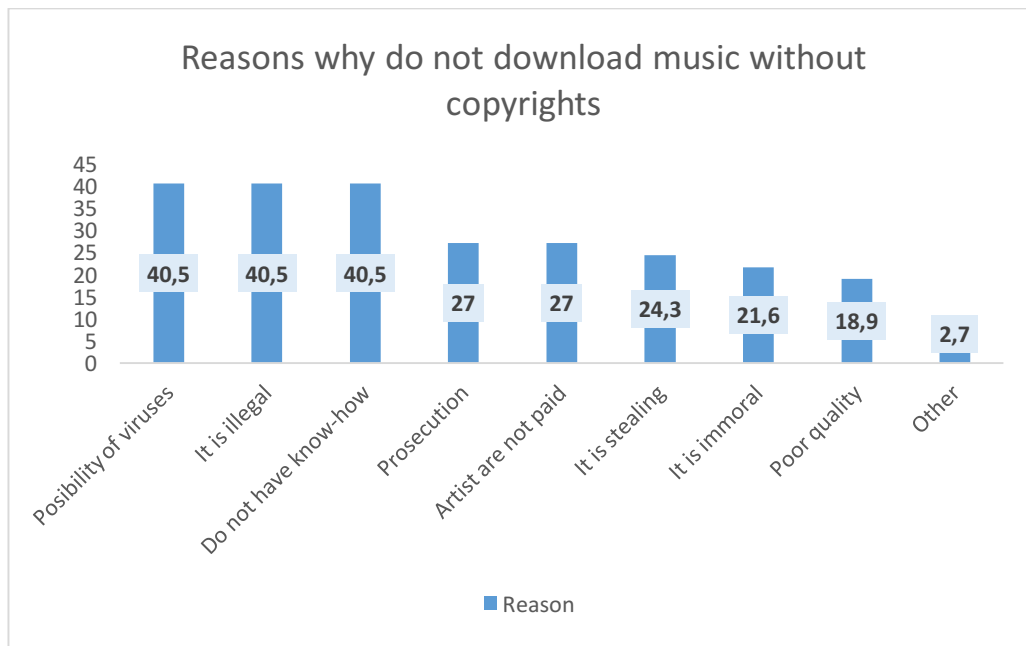


Figure 5.15 Reasons for not pirating music

## 5.6 Analysis of statements

The author has decided to put various statements regarding digital music market into questionnaire to get respondents' opinions. For this reason, the author constructed 5-point Likert scale including options – strongly disagree, disagree, undecided, agree and strongly agree. The total number of statements is 9. The age group of 20-35 years old represents Millennials and age group of 36-51 represents Generation X.

To analyse the results of these statements, the author has decided to create typology of the respondents by performing factor and cluster analysis. The first step in this process was to analyse whether there is a need for reduction of factors. For this purpose, correlation matrix of all statements was made (Table 5.11). The results showed that there is no need to discard any statement as red cells show low significance, therefore they indicate mutual correlation.

**Correlation Matrix<sup>a</sup>**

Sig. (1-tailed)

	Being able to copy music onto different devices is very important to me	Being able to listen to my music on more than one device is important to me	I am interesten in cloud based music services	Even with access to streaming services, I am still interested in owning music	I think it is ok to download music from the Internet without paying for it	I do care whether the music I download is copyrighted	I find music piracy immoral	I think that all music should be accessible for free	I am ok with adverts when listening music for free
Being able to copy music onto different devices is very		,000	,000	,000	,000	,183	,042	,003	,000
Being able to listen to my music on more than one device is	,000		,000	,000	,000	,276	,003	,000	,000
I am interesten in cloud based music services	,000	,000		,000	,050	,006	,000	,005	,001
Even with access to streaming services, I am still interested in	,000	,000	,000		,000	,008	,009	,004	,122
I think it is ok to download music from the Internet without	,000	,000	,050	,000		,004	,000	,000	,029
I do care whether the music I download is copyrighted	,183	,276	,006	,008	,004		,000	,023	,021
I find music piracy immoral	,042	,003	,000	,009	,000	,000		,004	,005
I think that all music should be accessible for free	,003	,000	,005	,004	,000	,023	,004		,023
I am ok with adverts when listening music for free	,000	,000	,001	,122	,029	,021	,005	,023	

a. Determinant = ,038

Table 5.11 Correlation matrix of statements

To ensure that the sample is adequate for factor analysis, the Kayser-Meyer-Olkin statistic was used (Table 5.12). To achieve appropriate result, the scored value has to be higher than 0,5. The outcome of this statistic is 0,703, therefore the result is appropriate. Barlett's test of sphericity confirms that each variable correlates perfectly with itself but do not correlate with other variables.

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,703
Bartlett's Test of Sphericity	Approx. Chi-Square	564,134
	df	36
	Sig.	,000

Table 5.12 KMO Measure of Sampling Adequacy and Bartlett's Test of Sphericity

Additionally, component matrix was created, which resolved into two new components (factors) (Table 5.13). Factors are more related to the statements the more the values are closer to 1. According to the results, it is needed to assign names to the factors. Therefore, the first factor is named "interest in music accessibility" and the second factor is described as "finding music piracy immoral".

**Component Matrix<sup>a</sup>**

	Component	
	1	2
Being able to copy music onto different devices is very important to me	,833	,011
Being able to listen to my music on more than one device is important to me	,876	-,010
I am interesten in cloud based music services	,712	,210
Even with access to streaming services, I am still interested in owning music	,608	,020
I think it is ok to download music from the Internet without paying for it	,460	-,680
I do care whether the music I download is copyrighted	,193	,720
I find music piracy immoral	,262	,823
I think that all music should be accessible for free	,459	-,572
I am ok with adverts when listening music for free	,449	,131

*Table 5.13 Component Matrix*

Confirmation, that these two new components are appropriate is showed in explained total variance (Table 5.14), where the components account for 56,8 per cent of original variability and in the scree plot (Figure 5.16), where it is proved that eigenvalue is higher than one for both factors.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,066	34,069	34,069	3,066	34,069	34,069	3,055	33,941	33,941
2	2,047	22,749	56,818	2,047	22,749	56,818	2,059	22,877	56,818
3	,932	10,358	67,176						
4	,914	10,158	77,334						
5	,661	7,348	84,682						
6	,452	5,023	89,705						
7	,428	4,752	94,457						
8	,327	3,631	98,088						
9	,172	1,912	100,000						

Extraction Method: Principal Component Analysis.

*Table 5.14 Total Variance Explained*

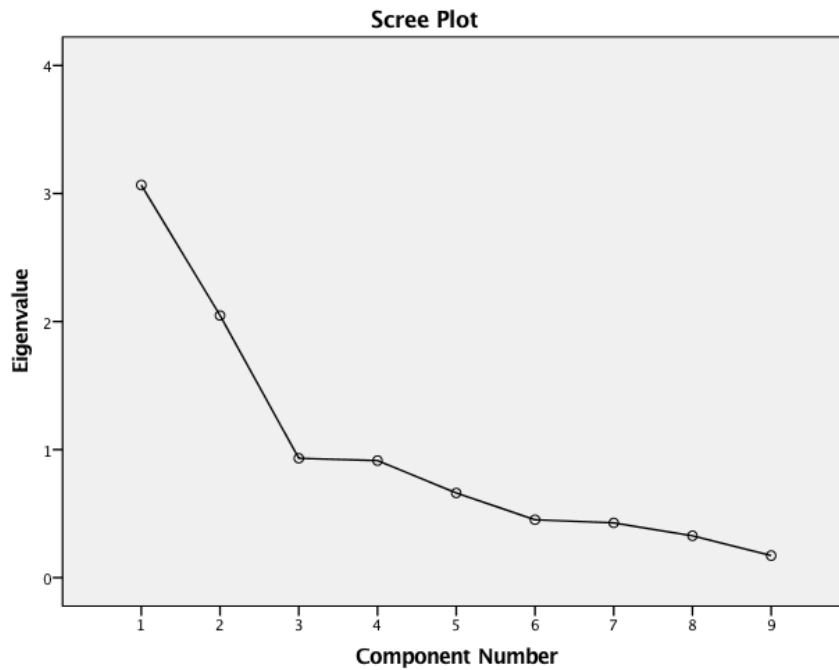


Figure 5.16 Scree Plot

After creating factor analysis and creating two new components, the cluster analysis is being conducted. Cluster analysis is used to classify respondents into relatively homogenous groups and to assign each respondent on only one cluster. This method is used to create typology of the respondents. The analysis divided the respondents into four different clusters (Table 5.15, Table 5.16).

Average Linkage (Between Groups)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	90	45,5	50,6	50,6
	2	54	27,3	30,3	80,9
	3	15	7,6	8,4	89,3
	4	19	9,6	10,7	100,0
	Total	178	89,9	100,0	
Missing	System	20	10,1		
Total		198	100,0		

Table 5.15 Average Linkage Between Groups

Report					
Mean					
	Average Linkage (Between Groups)				
	1	2	3	4	Total
Being able to copy music onto different devices is very important to me	3,73	3,85	3,07	1,11	3,43
Being able to listen to my music on more than one device is important to me	4,01	4,26	3,27	1,16	3,72
I am interested in cloud based music services	3,66	2,98	2,67	1,11	3,10
Even with access to streaming services, I am still interested in owning music	3,27	3,28	3,20	1,42	3,07
I think it is ok to download music from the Internet without paying for it	2,69	4,00	1,33	1,74	2,87
I do care whether the music I download is copyrighted	3,04	1,67	4,53	1,37	2,57
I find music piracy immoral	3,22	1,93	4,60	1,42	2,75
I think that all music should be accessible for free	2,94	4,02	1,60	1,63	3,02
I am ok with adverts when listening music for free	3,23	3,19	3,07	1,53	3,02

Table 5.16 Report of Average Linkage Between Groups

According to the results, the author has assigned names to each cluster, which are Heavy listeners (50,6 per cent), Pirates (30,3 per cent), Moralists (8,4 per cent) and Passive listeners (10,7 per cent) (Figure 5.17).

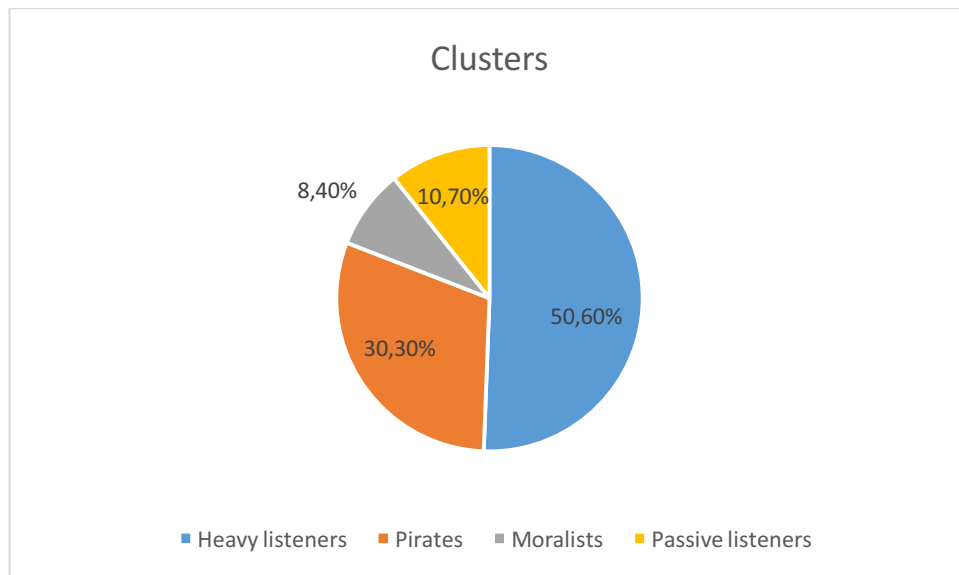


Figure 5.17 Definition of clusters

The most of the respondents belong to the first cluster (50,6 per cent) which was named Heavy listeners. This group has no significant difference between the Generation X and Millennials as well as between countries UK and Czech Republic. They are interested in music accessibility on different devices and have interest in cloud based services. They slightly tend to stand on the neutral side when it comes to music piracy and copyrights.

The second biggest group is Pirates with 30,3 per cent. They are also interested in music accessibility similarly to Heavy listeners. However, they hold the view that it is ok to download music and do not pay for it and they believe that all music should be accessible for free. Additionally, they do not care about music copyrights and do not find music piracy immoral. There was not a significant difference between the generations in this group, however, the group is represented more by Czech respondents than British respondents.

On the other hand, the group Moralists (8,3 per cent) disagree with opinion that it is ok to download music for free they do not think that all music should be accessible for free. Moreover, they find music piracy immoral and they care whether is music they download is copyrighted. Moralists are dominantly represented by British residents and also by older Generation X.

The last group is Passive listeners (10,7 per cent). This group does not show any interest in accessibility of music. Additionally, they respondent did not agree with all the remaining statements, which is probably caused by lack of interest in music.

## 5.7 Discussion

The first research objective analysed, if there is a difference between listening to digital music between two generations – Generation X and Millennials. The null hypothesis of this research objective was rejected, therefore the alternative hypothesis was accepted which indicated that there was a statistically significant difference. The results showed that 98,5 per cent of Millennials listen to digital music files and 88,3 per cent of them do it regularly. On the other hand, Generation X who listen to digital music represents 70,5 per cent, from which majority of them do so not so frequently. These results are connected to characteristic of each generation. The Generation X is highly flexible to changes, especially with technology (Crampton et al., 2006), however they are not shaped by technology as Millennials, who are considered to be the most technologically sophisticated generation (Crampton and Hodge, 2011) as they grew up surrounded by technology and are considered to be online 24/7 (Waterworth, 2013). Additionally, the author has decided to compare listening to digital music across two countries – United Kingdom and Czech Republic. The results demonstrated, that British residents listen to digital music more with 94,6 per cent of the sample whereas Czech residents represented 85,7 per cent. However, the results showed that Czechs have higher percentage of people, who listen to digital music frequently.

The second research objective analysed, whether there is a difference between Generation X and Millennials in terms of what platform they use to listen to digital music. Neither, the null and the alternative, hypothesis of this research objective could not be rejected nor accepted. This was caused by a conflict within the research objective as some platforms for listening to digital music files had a statistically significant difference and some did not. Potentially, the alternative hypothesis of the research could be applied to music streaming and music piracy. The other platforms; digital stores, music videos, online radios and social sound platforms would fail to reject the null hypothesis. In this case, the results show that 36,8 per cent of Millennials use streaming services to get access to digital music files. The popularity of music streaming defined by its sustainable and sharp growth in recent years (IFPI, 2015). On the other hand, only 11,6 per cent of the Generation X stated they use these services. Also, the music piracy represented high

portion of the sample as 61,7 per cent of Millennials stated one of the platform of accessing to music is through pirate copies. The Generation X's representation consisted of 27,9 per cent. Additionally, the author has decided to compare both countries – United Kingdom and Czech Republic in the same matter. All listed platforms, with exception of online radios showed statistically significant difference. The digital stores were listed by 29,9 per cent of Brits, compared to 14,6 per cent of Czechs. This might be influenced by other results, which showed that Czech are less willing to pay for digital music content. Streaming services are more popular in United Kingdom with 42,5 per cent of respondents compared to 19,1 per cent of Czechs. This might be caused by the fact, that Czech Republic has smaller portion of legal digital music revenues compared to physical sales revenues (40 to 60 percent), while globally, the digital and physical music sales were evened for the first time in the history (IFPI, 2015). Additionally, the result showed that the most popular platform for listening to digital music are music video websites, which were listed by 91 per cent of Czechs and 74,7 per cent of Brits.

The third research objectives analysed, if there is a difference between how much are respondent willing to pay for digital music content monthly and the stated generations. The null hypothesis was rejected, therefore the alternative hypothesis was accepted, which shows that there is statistically significant difference. Around 40 per cent of Millennials stated, that they are not willing to pay for digital music, compared to 76,7 per cent of the Generation X. The higher percentage of Generation might be caused by generally smaller interest in digital music content, which is analysed in first research objective. Additionally, the comparison between the countries, in this matter, was made as well. The results showed that the percentage of Czechs who are not willing to pay for the digital content is higher than percentage of Brits. Moreover, Czechs are willing to pay less than Brits.

The fourth research objective analysed, whether there is a difference between music piracy habits and the generations – Millennials and Generation X. The null hypothesis of this research objective was also rejected, therefore the alternative hypothesis was accepted, which showed, that there is a statistically significant difference between music piracy habits and the generations. More than 40 per cent of Millennials stated that they



download music without copyright frequently. This is more than double of IFPI estimation, which suggests that 20 per cent of the Internet users access digital music files via pirate services on regular basis (2015). The Generation X has much smaller share in this matter, which accounts for 14 per cent of the respondents. Moreover, more than 30 per cent of Millennials and more than 20 per cent of Gen Xers stated, that they use pirate services to access digital music, but they do not do so often. More than a half of Generation X stated, that they do not use pirate services, compared to only 11,1 per cent of Millennials. Little bit more than 10 per cent of both generations stated, they they prefer not to say. Additionally, the comparison on music piracy habits between the countries was conducted. Czechs, in overall, download music via pirate services more often. More than 45 per cent of Czech residents stated, that they download music without copyright frequently, compared to 27,3 per cent of Brits. More than twice of British residents (28,4 per cent) do not use pirate services, compared to Czechs (13,3 per cent). Additionally, Czech residents were more inclined to do not make a comment on this matter. The author of the research also decided to investigate, what are the reasons behind music piracy. The respondents who answered, that they do pirate music, were asked why they do so. The most selected reason for music piracy was inability to afford legal services with 43,3 per cent, followed by an opinion, that is is socially acceptable with 36,7 per cent and an opinion, that artist have plenty of other revenue resources stated by 26,7 per cent of respondents. On the other hand, respondents who stated, that they do not pirate music, where asked what are their concerns in not do so. The most frequent answers were possibility of viruses, illegality and lack of know-how. These results show contradiction in opinion whether is music piracy harmful to artists. Hoffman states, that music piracy is actually helping artists, as the listeners access their music, which they would not buy otherwise (2015). Actually, even some artists, such as David Grohl (Foo Fighters), Thom Yorke (Radiohead) and Lady Gaga and more do not see music piracy as a problem as it more likely engage its users to attend a concert or buy merchandize (UpVenue, 2016).

Additional results showed that younger generation – Millennials, listen to music more frequently than Generation X. Moreover, the most used device for listening music is PC or laptop as it was stated by 74,7 per cent of all respondents, followed by smartphones with 73 per cent and car stereo with nearly 50 per cent. This shows shift in

technology, when smartphones are more and more popular and they substitute the function of MP3 player, which was stated only by 7,9 per cent of respondents.

## 6 Conclusion

The main aim of this research was to investigate consumer behaviour on digital music market exhibited by two examined age cohorts, Millennials and Generation X. This paper examined listeners' music habits, their preferences in various digital music platforms, willingness to pay for digital music content and look into music piracy. Additionally to the examination of the generations, this paper also compares listeners of digital music of two countries – United Kingdom and Czech Republic, in these matters.

The author of the research stated four research objectives, which stands as follow:

RO<sub>1</sub>: Determine the differences between Generation X and Millennials in listening to digital music files.

H<sub>0</sub>: There is no difference in listening to digital music files between Generation X and Millennials.

H<sub>1</sub>: There is a difference in listening to digital music files between Generation X and Millennials.

RO<sub>2</sub>: Determine the differences between Generation X and Millennials in terms of what platform they use to listen to digital music files.

H<sub>0</sub>: There is no difference in terms of what platform is used to listen to digital music be files between Generation X and Millennials.

H<sub>1</sub>: There is a difference in terms of what platform is used to listen to digital music between Generation X and Millennials.

RO<sub>3</sub>: Determine the differences of how much are people willing to spend on music monthly between Generation X and Millennials.

H<sub>0</sub>: There is no difference in monthly spending on music between Generation X and Millennials.

H<sub>1</sub>: There is a difference in monthly spending on music between Generation X and Millennials.

RO<sub>4</sub>: Determine the differences in music piracy habits between Generation X and Millennials.

H<sub>1</sub>: There is no difference in music piracy habits between Generation X and Millennials.

H<sub>0</sub>: There a difference in music piracy habits between Generation X and Millennials.

Primary data were collected primarily through online questionnaire and were later analysed using several statistical methods in IMB SPSS Statistics software in order to reject or accept research objectives.

The first research objective's null hypothesis was rejected, therefore the alternative hypothesis "there is a difference in listening to digital music files between Generation X and Millennials" was accepted. The younger generation – Millennials listen to digital music frequently in vast majority and the remaining one listen to digital music files as well, but not so frequently. On the other hand, Generation X majority listen to digital music as well, however, the most of them do not tend to do so often.

Neither, the null and the alternative, hypothesis of second research objective was accepted. This was caused due to contradiction within the research objective, as some digital music platforms had statistically significant difference and some did not. Potentially, the alternative hypothesis of the research could be applied to music streaming and music piracy only, and the rest – digital stores, music videos, online radios and social sound platform would fail to reject the null hypothesis. Therefore, almost half of the Millennials would use streaming services to listen to digital music content a more than half of them would download pirate copies. The Generation X would have significantly smaller representation in the both ways of accessing to digital music content.

The third research objective's null hypothesis was rejected, therefore the alternative hypothesis "there is a difference in monthly spending on music between Generation X and Millennials" was accepted. Both generations' biggest preference is to do not pay for digital music. The older generation – Generation X, showed almost double amount of people who are not willing to pay for digital music. This may be caused by their generally smaller interest in digital music content. More than a half of Millennials are willing to pay for digital music, the amount however differs.

The fourth research objective's null hypothesis was also rejected, therefore the alternative hypothesis "there is a difference in music piracy habits between Generation X and Millennials" was accepted. A half of the Generation X does not download music without copyrights. On the other hand, the majority of the younger generation – Millennials, download pirate music copies from the Internet, while most of them do so frequently. The most selected reason for downloading music without copyright was inability to afford legal services, followed by a opinion, that it is socially acceptable. People who stated that do not pirate music, were mostly concerned about possibility of viruses, illegality or did not have know-how about how to pirate music.

This research includes several limitations, which are described in "Limitations of Research" in more detail. These include disproportion of the sample size between stated generations. Additionally, the sample might be considered as non-representative, as it results might not represent countries – United Kingdom and Czech Republic, as a whole due. Moreover, the respondents might not state true about music piracy habits, as it is a controversial topic. Therefore, any results of this paper should be taken with care.

## Reference List

- Barnard, Robert, Dave Cosgrave, and Jennifer Welsh. 1998. Chips and Pop: Decoding the Nexus Generation. Toronto: Malcolm Lester Books.
- Barrow, P. (1994). Marketing to generation X. *Canadian Manager*, 19(1), 23.
- Bawany, A. (2014). Generation Y. *Leadership Excellence*, 31(8), 6-7.
- Blackwell, R. D., Miniard, P. W., & Engel, J. F. (2001). *Consumer behavior* (9th ed.). Ft. Worth, Tex: Harcourt College Publishers.
- Bonner, S., & O'Higgins, E. (2010). Music piracy: Ethical perspectives. *Management Decision*, 48(9), 1341-1354. doi:10.1108/00251741011082099
- Coupland, D. (1996). *Generation X: Tales for an accelerated culture*. London: Abacus.
- Crampton, S. M., & Hodge, J. W. (2006). the supervisor and generational differences. *Allied Academies International Conference. Academy of Organizational Culture, Communications and Conflict. Proceedings*, 11(2), 19.
- Crampton, S., & Hodge, J. (2011). Generation Y: Uncharted Territory. *Journal of Business & Economics Research (JBER)*, 7(4). doi:http://dx.doi.org/10.19030/jber.v7i4.2272
- Denscombe, M. (2014). *The good research guide: For small scale research projects* (Fifth ed.). Maidenhead: Open University Press.
- Dolata, U. 2011. „The Music Industry and the Internet: A Decade of Disruptive and Uncontrolled Sectoral Change“. SOI Discussion Paper 2011-02. University of Stuttgart - Institute of Social Sciences.

- Doyle, C.(2011). market segmentation. In A Dictionary of Marketing. : Oxford University Press. Retrieved 30 Mar. 2016, from <http://www.oxfordreference.com.libaccess.hud.ac.uk/view/10.1093/acref/9780199590230.001.0001/acref-9780199590230-e-1104>.
- Evans, G. (2008). Marketing to generation Y. *Furniture Today*, 32(38), 14-n/a. Retrieved from <http://search.proquest.com/docview/235488382?accountid=11526>
- Fallon, N. (2014). *Marketing to Millennials: How to Capture Gen Y Consumers*. Retrieved from <http://www.businessnewsdaily.com/6602-selling-to-generation-y.html>.
- Fay, W. B. (1993). Understanding "generation X". *Marketing Research*, 5(2), 54. Retrieved from <http://search.proquest.com/docview/202673257?accountid=11526>
- Garofalo, R. 1999. „From Music Publishing to MP3: Music and Industry in the Twentieth Century“. *American Music* Vol. 17, No. 3: 318-354
- Greasley, P. (2007). *Quantitative data analysis using SPSS : An introduction for health and social studies* McGraw-Hill Education.
- Gur u, C. I. (2012). A life-stage analysis of consumer loyalty profile: Comparing generation X and millennial consumers. *Journal of Consumer Marketing*, 29(2), 103-113. doi:10.1108/07363761211206357
- Harrison, R., Newholm, T., & Shaw, D. (2005). *The ethical consumer*. London: SAGE. doi:10.4135/9781446211991
- Hawkins, D. I., & Mothersbaugh, D. L. (2010). *Consumer behavior: Building marketing strategy* (11th, International student ed.). Boston, [Mass.];London,: McGraw-Hill/Irwin.

Hildebrandt, S. (2011). Marketing through the generations. New York: BNP Media.

Hoffman, D. (2015). Is music piracy a good thing for musicians?. Retrieved from <https://www.quora.com/Is-music-piracy-a-good-thing-for-musicians>.

IFPI. (2015). IFPI Digital Music Report 2015. : IFPI

IFPI. (2015). Tisková zpráva: Výsledky trhu 2015. : IFPI

IFPI. (2016). Tackling music piracy. Retrieved from <http://www.ifpi.org/music-piracy.php>.

JENNINGS, L., 2012. Generation X. *Nation's Restaurant News*, **46**(9), pp. 36-n/a.

Jorgensen, B. (2003). Baby boomers, generation X and generation Y? *Foresight*, 5(4), 41-49. doi:10.1108/14636680310494753

Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, 7(4), 396-403. doi:10.9734/BJAST/2015/14975

Krahn, H. J., & Galambos, N. L. (2014). Work values and beliefs of 'generation X' and 'generation Y'. *Journal of Youth Studies*, 17(1), 92-112. doi:10.1080/13676261.2013.815701

Leung, S. (2011). A comparison of psychometric properties and normality in 4-, 5-, 6-, and 11-point likert scales. *Journal of Social Service Research*, 37(4), 412-421. doi:10.1080/01488376.2011.580697

Maylor, H., & Blackmon, K. L. (2005). Researching business and management. Basingstoke: Palgrave Macmillan.



- McDevitt, D. (2013). *What makes a brand appeal to Generation Y?*. Retrieved from <http://www.marketingmagazine.co.uk/article/1211416/makes-brand-appeal-generation-y>.
- Miller, M. (2012). *The ultimate digital music guide*. Indianapolis, Ind: Que.
- Neuborne, E., & Kerwin, K. (1999). Generation Y. (cover story). *Businessweek*, (3616), 80-88.
- Popham, J. (2011). Factors influencing music piracy. *Criminal Justice Studies*, 24(2), 199-209. doi:10.1080/1478601X.2011.561648
- Robson, C., & McCartan, K. (2016). *Real world research: A resource for users of social research methods in applied settings* (Fourth ed.). Chichester: Wiley.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (6th ed.). Harlow: Pearson
- Sayers, R. (2007). The right staff from X to Y. *Library Management*, 28(8/9), 474-487. doi:10.1108/01435120710837765
- Schroer, W.J. (2012). *Generations X,Y, Z and the Others - Cont'd*. Retrieved from <http://www.socialmarketing.org/newsletter/features/generation3.htm>.
- Solomon, M. R. (2015). *Consumer behavior: Buying, having, and being* (Eleventh;Global; ed.). Boston: Pearson.
- Solomon, M. R., Bamossy, G. J., Askegaard, S., & Hogg, M. K. (2013). *Consumer behaviour: A european perspective* (Fifth ed.). Harlow, England: Pearson.

- Statt, D. A. (1997). *Understanding the consumer: A psychological approach*. London: Macmillan.
- Szmigin, I., & Piacentini, M. (2015). *Consumer behaviour*. Oxford: Oxford University Press.
- UpVenue. (2016). Artists Speak Out On Music Piracy. Retrieved from <https://www.upvenue.com/article/1590-musician-stances-on-music-piracy.html>.
- Waterworth, N. (2013). *Generation X, Generation Y, Generation Z, and the Baby Boomers* . Retrieved from <http://www.talentedheads.com/2013/04/09/generation-confused/>.
- Williams, K.C. and Page, R.A. (2011). *Marketing to the generations*. Journal of Behavioral Studies in Business, Vol. 5 No. 1, pp. 1-17.
- Yigit, S., & Aksay, K. (2015). A comparison between generation X and generation Y in terms of individual innovativeness behavior: The case of turkish health professionals. *International Journal of Business Administration*, 6(2), 106-n/a. doi:<http://dx.doi.org/10.5430/ijba.v6n2p106>

## **List of Abbreviations**

CD – Compact Disk

DRM – Digital Rights Management

Et. al. – et alia – and others

IFPI – International Federation of the Phonographic Industry

P2P – Peer-to-Peer

RO – Research objective


UK – United Kingdom

## **Declaration of Utilization of Results from a Bachelor Thesis**

### **Herewith I declare that**

- I am informed that Act No. 121/2000 Coll. – the Copyright Act, in particular, Section 35 – Utilization of the Work as a Part of Civil and Religious Ceremonies, as a Part of School Performances and the Utilization of a School Work – and Section 60 – School Work, fully applies to my diploma (bachelor) thesis;
- I take account of the VSB – Technical University of Ostrava (hereinafter as VSB-TUO) having the right to utilize the diploma (bachelor) thesis (under Section 35(3)) unprofitably and for own use ;
- I agree that the diploma (bachelor) thesis shall be archived in the electronic form in VSB-TUO's Central Library and one copy shall be kept by the supervisor of the diploma (bachelor) thesis. I agree that the bibliographic information about the diploma (bachelor) thesis shall be published in VSB-TUO's information system;
- It was agreed that, in case of VSB-TUO's interest, I shall enter into a license agreement with VSB-TUO, granting the authorization to utilize the work in the scope of Section 12(4) of the Copyright Act;
- It was agreed that I may utilize my work, the diploma (bachelor) thesis, or provide a license to utilize it only with the consent of VSB-TUO, which is entitled, in such a case, to claim an adequate contribution from me to cover the cost expended by VSB-TUO for producing the work (up to its real amount).

Ostrava dated 10. 6. 2016



David Božon

## List of Tables

Table 4.1 Profile of respondents according to gender .....	27
Table 4.2 Profile of respondents according to Age.....	27
Table 4.3 Profile of respondents according to country of residence.....	28
Table 4.4 Profile of respondents according to qualification .....	28
Table 4.5 Profile of respondents according to employment .....	29
Table 5.1 Chi-square test for frequency of listening to music/age .....	31
Table 5.2 Chi-square test for the Internet usage/age.....	34
Table 5.3 ANOVA test for age/digital music listening.....	36
Table 5.4 ANOVA test for country/digital music listening.....	37
Table 5.5 Age/platform for listening to digital music relationship.....	39
Table 5.6 Residency/platform for listening to digital music relationship.....	40
Table 5.7 Relationship willingness to pay/age .....	42
Table 5.8 Relationship willingness to pay/country .....	43
Table 5.9 ANOVA test for music piracy/age.....	45
Table 5.10 ANOVA test for music piracy/country .....	46
Table 5.11 Correlation matrix of statements.....	49
Table 5.12 KMO Measure of Sampling Adequacy and Bartlett's Test of Sphericity.....	49
Table 5.13 Component Matrix.....	50
Table 5.14 Total Variance Explained .....	50
Table 5.15 Average Linkage Between Groups .....	51
Table 5.16 Report of Average Linkage Between Groups.....	52

## List of Figures

Figure 2.1 How Consumers Make Decisions for Goods and Services .....	8
Figure 3.1 Streaming growth year on year.....	15
Figure 5.1 Frequency of listening to music according to age.....	31
Figure 5.2 Activities while listening to music according to age.....	32
Figure 5.3 Devices used to listen to music according to age .....	33
Figure 5.4 Frequency of the Internet usage .....	34
Figure 5.5 Listening to digital music according to age.....	35
Figure 5.6 Listening to digital music according to country .....	36
Figure 5.7 Platform for listening to digital music according to age .....	38
Figure 5.8 Platform for listening to digital music according to country.....	39
Figure 5.9 Most preferred platform according to age .....	40
Figure 5.10 Monthly willingness to pay according to age.....	41
Figure 5.11 Willingness to pay according to countries.....	43
Figure 5.12 Music piracy according to age.....	45
Figure 5.13 Music piracy according to countries.....	46
Figure 5.14 Reasons for music piracy.....	47
Figure 5.15 Reasons for not pirating music .....	48
Figure 5.16 Scree Plot.....	51
Figure 5.17 Definiton of clusters .....	52